# BEFORE THE BOARD OF COUNTY COMMISSIONERS OF LANCASTER COUNTY, NEBRASKA

IN THE MATTER OF AMENDING ARTICLE	$\Xi 2$ )
OF THE LINCOLN-LANCASTER COUNTY A	AIR) RESOLUTION NO. $K-17-0030$
POLLUTION CONTROL PROGRAM	)
REGULATIONS AND STANDARDS, AS	)
PROVIDED IN ATTACHMENTS "A"	)
THROUGH "H"	)

WHEREAS, pursuant to Neb. Rev. Stat. §13-801, et seq., Lancaster County and the City of Lincoln entered into an Interlocal agreement for the purpose of providing for the establishment of the 1993 Lincoln-Lancaster County Air Pollution Program;

WHEREAS, the Lancaster County Board of Commissioners readopted the Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards on December 10, 2013, under County Resolution No. R-13-0072;

WHEREAS, the Lincoln-Lancaster County Health Department has recommended amendments to Article 2 of the Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards, as provided in Attachments "A" through "H", attached hereto and incorporated by this reference;

WHEREAS, the City of Lincoln has already adopted such amendments; and

WHEREAS, on April 18, 2017, the Board of Commissioners of Lancaster County, Nebraska, conducted a public hearing regarding the adoption of the amendments to Article 2 of the Lincoln-Lancaster County Air Pollution Program Regulations and Standards, as provided in Attachments "A" through "H";

NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of Lancaster County, the amendments to County Resolution No. R-13-0072, Lincoln-Lancaster County Air Pollution Control Regulations and Standards, Article 2, as provided in Attachments "A" through "H" are hereby adopted, and shall become effective on the date of this Resolution. These amendments shall supersede all previous amendments not in conformance herewith.

BE IT FURTHER RESOLVED, that a copy of this Resolution be placed on file in the office of the County Clerk.

DATED this 18th day of April, 2017, in the County-City Building, Lincoln,

Lancaster County, Nebraska.

APPROVED AS TO FORM

this 18th day of April, 2017.

Deputy County Attorney

for JOE KELLY

Lancaster County Attorney

BY THE BOARD OF COUNTY COMMISSIONERS OF LANCASTER COUNTY, NEBRASKA

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#### ARTICLE 2. REGULATIONS AND STANDARDS.

#### SECTION 1. DEFINITIONS.

Unless otherwise defined, or a different meaning is clearly required by context, the following words and phrases, as used in the LLCAPCPRS and the related appendices shall have the following meanings:

"40 CFR" means Title 40 of the Code of Federal Regulations.

"Act" means the Clean Air Act, as amended (42 U.S.C. 7401 et seq.).

"Actual emissions" for purposes other than the Prevention of Significant Deterioration (PSD) program, means the actual rate of emissions of a pollutant from an emissions unit as determined below:

- (1) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during the preceding year and which is representative of normal source operation. The Director shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, existing control equipment, and types of material processed, stored, or combusted during the selected time period.
- (2) The Director may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (3) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

"Actual emissions", for purposes of the Prevention of Significant Deterioration (PSD) program, means the actual rate of emissions of a regulated New Source Review (NSR) pollutant from an emissions unit as determined in accordance with paragraphs (1) through (3) below except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a Plant-wide Applicability Limitation (PAL) under Article 2, Section 19, paragraph (K). Instead, "baseline actual emissions" and "projected actual emissions" shall apply for those purposes.

- (1) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive twenty-four (24) month period which precedes the particular date and which is representative of normal source operation. The Director shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, existing control equipment, and types of materials processed, stored, or combusted during the selected time period.
- (2) The Director may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (3) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

"Actuals PAL" for a major stationary source means a Plant-wide Applicability Limitation (PAL) based on the baseline actual emissions of all emissions units at the source that emit or have the potential to emit the PAL pollutant.

"Administrator" means the Administrator of the United States Environmental Protection Agency (U.S. EPA) or his or her designee.

"Affected facility" means, with reference to a stationary source, any apparatus to which a standard of performance is specifically applicable.

"Affected source" means a source that includes one or more affected units.

"Affected States" means any state that:

- (1) Is one of the following contiguous States: Colorado, Iowa, Kansas, Missouri, South Dakota, and Wyoming, and in the judgment of the Director may be affected by emissions from a facility seeking a Title V permit, modification, or renewal; or
- (2) Is a contiguous State within fifty (50) miles of the permitted source.

- "Affected unit" means a unit that is subject to emission reduction requirements or limitations under Article 2, Section 26.
- "Air contaminant" or "Air contamination" means the presence in the outdoor atmosphere of any dust, fumes, mist, smoke, vapor, gas, or other gaseous fluid, or particulate substance differing in composition from or exceeding in concentration the natural components of the atmosphere.
- "Air curtain incinerator" means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor.
- "Air pollutant" or "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in such quantities and of such duration as are or may tend to be injurious to human, plant or animal life.
- "Air pollution control agency" means a local government health authority charged with responsibility for enforcing ordinances or law relating to the prevention and control of air pollution.
- "Air Quality Control Region" means a region designated by the Governor, with the approval of the Administrator, for the purpose of assuring that national primary and secondary ambient air quality standards will be achieved and maintained.

### "Allowable emissions" means

- (1) For a stationary source, the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation or both) and the most stringent of the following:
  - (a) The applicable standards set forth in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Parts 61 or 63 (National Emission Standards for Hazardous Air Pollutants);
  - (b) Any applicable State Implementation Plan emissions limitation including those with a future compliance date; or
  - (c) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.
- (2) For a Plant-wide Applicability Limitation (PAL), the definition is the same as in (1) above except as this definition is modified according to (2)(b) below:
  - (a) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.
  - (b) An emissions unit's potential to emit shall be determined using the definition in this section except that the words "or enforceable as a practical matter" should be added after "federally enforceable".
- "Ambient air" means the portion of the atmosphere, external to buildings, to which the general public has access.
- "AP-42" refers to the Compilation of Air Pollutant Emission Factors, published by the EPA Office of Air Quality Planning and Standards.
- "Applicable requirement" means except as provided in paragraph (12) below, all of the following as they apply to emissions units in a source required to obtain an operating permit, including requirements that have been promulgated and approved by the City of Lincoln and/or the Lancaster County Board of Commissioners through rulemaking at the time of issuance but have future effective compliance dates:
  - (1) Any standard or other requirement provided for in the applicable implementation plan that implements the relevant requirements of the Act, including any revisions to the plan promulgated in 40 CFR Part 52:
  - (2) Any term or condition of any pre-construction permit;
  - (3) Any standard or other requirement under Article 2, Section 18 relating to standards of performance for new stationary sources;
  - (4) Any standard or other requirement established pursuant to Section 112 of the Act and regulations adopted in Article 2, Sections 23, 27, and 28 relating to hazardous air pollutants listed in Appendix II and III of the LLCAPCPRS;
  - (5) Any standard or other requirement of the acid rain program under Article 2, Section 26;

- (6) Any requirements established pursuant to Article 2, Section 26;
- (7) Any standard or other requirement governing solid waste incineration under Article 2, Section 18 or pursuant to Section 129(e) of the Act;
- (8) Any standard or other requirement for consumer and commercial products under Section 183(e) of the Act and regulations adopted by the City of Lincoln or the Lancaster County Board of Commissioners;
- (9) Any standard or other requirement for tank vessels under Section 183(f) of the Act and regulations adopted by the City of Lincoln or the Lancaster County Board of Commissioners;
- (10) Any standard or other requirement to protect stratospheric ozone as promulgated pursuant to Title VI of the Act and regulations adopted by the City of Lincoln or the Lancaster County Board of Commissioners; and
- (11) Any National Ambient Air Quality Standard (NAAQS) or increment or visibility requirement under the Prevention of Significant Deterioration (PSD) program as applicable to temporary sources permitted pursuant to Article 2, Section 10.
- (12) "Applicable requirements under the Act" means federal regulations promulgated pursuant to the Clean Air Act, as amended, which have not been considered and adopted by the City of Lincoln or the Lancaster County Board of Commissions.

#### "Area source" means:

- (1) For the purposes of Class I permits under Article 2, Section 5, paragraph (A)(1)(b), any stationary source of hazardous air pollutants that is not a major source and as more particularly defined by National Emission Standards for Hazardous Air Pollutants promulgated under 40 CFR Part 63 and adopted by the City of Lincoln or the Lancaster County Board of Commissioners.
- (2) For all other purposes, any small residential, governmental, institutional, commercial, or industrial fuel combustion operation; on-site waste disposal facility, vessels, or other transportation facilities, or other miscellaneous sources, as identified through inventory techniques approved by the Director.
- (3) Area source shall not include motor vehicles or non-road vehicles.

"Baseline actual emissions" has the definition given to it in Article 2, Section 19, paragraph (E).

"Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d)(1)(A)(ii) or (iii) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: equal to or greater than one microgram per cubic meter  $(1.0 \,\mu\text{g/m}^3)$  (annual average) for  $SO_2$ ,  $NO_2$ , or  $PM_{10}$ ; or equal to or greater than three-tenths of a microgram per cubic meter  $(0.3 \,\mu\text{g/m}^3)$  (annual average) for  $PM_{2.5}$ .

"Baseline concentration" means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. The baseline concentration is determined as follows:

- (1) A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
  - (a) The actual emissions, as defined in this section, representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (2) below; and
  - (b) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
- (2) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
  - (a) Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and
  - (b) Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

"Begin actual construction" means in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipe work, and construction of permanent storage structures. With respect to a change in method of operating this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

"Best Available Control Technology", or "BACT":

- For purposes of the Prevention of Significant Deterioration (PSD) program means an emission (1) limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the Director, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combination techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60 and 61. If the Director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation, and shall provide for compliance by means which achieve equivalent results.
- (2) For purposes other than the Prevention of Significant Deterioration (PSD) program, means an emission limitation or a design equipment, work practice, operational standard or combination thereof, which results in the greatest degree of reduction of a pollutant as determined by the Director to be achievable by a source, on a case-by-case basis, taking into account energy, public health, environmental and economic impacts and other cost.

"Board of Health" means the Lincoln-Lancaster County bBoard of Health.

"Building, structure, or facility" for purposes other than the Prevention of Significant Deterioration (PSD) program means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

"Building, structure, facility, or installation", for purposes of the Prevention of Significant Deterioration (PSD) program, means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

"Class I operating permit" means any permit or group of permits covering a Class I source that is issued, renewed, amended, or revised pursuant to the LLCAPCPRS and meets the definition of Title V permit for purposes of the Clean Air Act.

"Class I source" means any source subject to the Class I permitting requirements of Article 2, Section 5.

"Class II operating permit" means any permit or group of permits covering a Class II source that is issued, renewed, amended, or revised pursuant to the LLCAPCPRS.

"Class II source" means any source subject to the Class II permitting requirements of Article 2, Section 5.

"Clean lumber" means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

"CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e)" shall represent an amount of greenhouse gases (GHGs) emitted, and shall be computed by the sum total of multiplying the mass amount of emissions, in tons per year (tpy), for each of the six (6) greenhouse gases in the pollutant GHGs, by each of the gas's associated global warming potential (see the definition for "Global Warming Potential" in this section).

"Commence" as applied to construction, reconstruction, or modification of a stationary source means that the owner or operator has all necessary pre-construction approvals and either has:

- (1) Begun, or caused to begin, a continuous program of physical on-site construction of the source to be completed within a reasonable time;
- (2) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.
- "Complaint" means any charge, a however informal, to or by the Department that any person or agency, private or public, is polluting the air or is violating the provisions of the LLCAPCPRS.
- "Complete" means, in reference to an application for a permit, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the Department from requesting or accepting any addition information.
- "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.
- "Consumer Price Index" or "CPI" means the average of the Consumer Price Index for all urban consumers published by the United States Department of Labor at the close of the twelve (12) month period ending on August 31 of each year.
- "Continuous emissions monitoring system (CEMS)" means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.
- "Continuous emissions rate monitoring system (CERMS)" means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).
- "Continuous parameter monitoring system (CPMS)" means all of the equipment necessary to meet the data acquisition and availability requirements of the Prevention of Significant Deterioration program, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate,  $O_2$  or  $CO_2$  concentrations), and to record average operational parameter value(s) on a continuous basis.
- "Control" and "controlling" means prohibition of contaminants as related to air pollution.
- "Control equipment" means any equipment that functions to prevent the formation of or the emission to the atmosphere of air contaminants from any fuel burning equipment, incinerator, or process equipment.
- "Control strategy" means a plan to attain National Ambient Air Quality Standards (NAAQS) or to prevent exceeding those standards.
- "Crematory" means a furnace used to cremate human-and or animal remains that is owned and/or operated by a person(s) engaged in the business of conducting cremations.
- "Department" means the Lincoln-Lancaster County Health Department.
- "Designated representative" means a responsible natural person authorized by the owners and operators of an Affected source and of all Affected units at the source, as evidenced by a certificate of representation submitted in accordance with subpart B of 40 CFR Part 72, to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the Acid Rain Program. Whenever the term "responsible person" is used in the LLCAPCPRS it shall be deemed to refer to the "designated representative" with regard to all matters under the Acid Rain Program.
- "Deviation" means a departure from an indicator range or work practice for monitoring, consistent with an averaging period specified for averaging the results of the monitoring.
- "Director" means the Health Director of the Lincoln-Lancaster County Health Department, or any representatives, agents, or employees of the Director.

"Dioxin/furans" means total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzo-furans.

"Dispersion technique" means any technique which attempts to affect the concentration of a pollutant in the ambient air by using that portion of a stack which exceeds good engineering practice stack height, varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of the pollutant, or increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise. The preceding sentence does not include:

- (1) The re-heating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;
- (2) The use of smoke management in agricultural or silvicultural prescribed burning;
- (3) The merging of exhaust gas streams where:
  - (a) The source owner or operator demonstrates that the facility was originally designed and constructed with such merged gas streams;
  - (b) After July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the Allowable emissions of a pollutant. This exclusion from the definition of "dispersion techniques" shall apply only to the emission limitation for the pollutant affected by such change in operation; or
  - (c) Before July 8, 1995, such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Director shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Director shall deny credit for the effects of such merging in calculating the allowable emissions for the source.
- (4) Episodic restrictions on residential wood burning and open burning;
- (5) Techniques such as manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack, or other selective handling of exhaust gas streams, which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed five thousand (5,000) tons per year.

"Draft permit" means the version of a permit for which the permitting authority offers public participation and, in the case of a Class I draft operating permit, affected state review.

"Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than twenty-five megawatts (25 MW) electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Elevated terrain" means terrain, which may affect the calculation of good engineering practice stack height.

"Emergency generator" means a generator whose sole function is to provide backup power when electric power from the local utility is interrupted.

"Emission data" means chemical analysis of process fuel and the manufacturing or production process, as well as operational procedure and actual nature and amounts of emissions.

"Emission limitation" and "Emission standard" mean a requirement established by a State, local government, or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

"Emission allowable under the permit" means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement or applicable requirement under the Act that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid any of the same to which the source would otherwise be subject.

"Emissions unit" means any part or activity of a stationary source which emits or would have the potential to emit any regulated air pollutant ("regulated NSR pollutant" for purposes of the Prevention of Significant Deterioration program) or any pollutant listed in Appendix II. This term includes electric utility steam generating units. This term is not meant to alter or affect the definition of the "unit" for purposes of Title IV of the Act.

- (1) For purposes of the Prevention of Significant Deterioration (PSD) program, there are two types of emissions units:
  - (a) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than two (2) years from the date such emissions unit first operated; and
  - (b) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (1) above.

"Emissions" means releases or discharges into the outdoor atmosphere of any air contaminant or combination thereof.

"Excessive concentrations" for the purpose of determining "good engineering practice stack height" defined elsewhere in this section, means:

- (1) For sources seeking credit for stack height exceeding that established in paragraphs (1) and (2) of the definition of "good engineering practice (GEP) stack height", a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard.
  - For sources subject to the prevention of significant deterioration program (40 CFR Part 51 §51.166 and 40 CFR Part 52 §52.21), an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or in part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this part shall be prescribed by the new source performance standard that is applicable to the source category unless the owner or operator demonstrates that this emission rate is not feasible. Where such demonstrations are approved by the Director, an alternative emission rate shall be established in consultation with the source owner or operator.
- (2) For source seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established in paragraphs (1) and (2) of the definition of "good engineering practice (GEP) stack height", either a maximum ground-level concentration due in whole or part of downwash, wakes or eddy effects as provided in paragraph (1) above, except that the emission rate specified by any applicable State implementation plan (or, in the absence of such a limit, the actual emission rate) shall be used, or the actual presence of a local nuisance caused by the existing stack, as determined by the Director.
- (3) For sources seeking credit after January 12, 1979 for a stack height determined in paragraphs (1) and (2) of the definition of "good engineering practice (GEP) stack height", where the Director requires the use of a field study of fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984 based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970 based on the aerodynamic influence of structures not adequately represented by the equations in paragraphs (1) and (2) of the definition of "good engineering practice (GEP) stack height", a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects that is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

"Existing source" means equipment, machines, devices, articles, contrivances, or installations which are in being on the effective date of the LLCAPCPRS.

"Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

"Federally enforceable" means all limitations, conditions, and requirements within any applicable State Implementation Plan, and permit requirements established in any permit issued pursuant to the LLCAPCPRS, and any requirements in Article 2, Section 18, Section 23, Section 27 and Section 28 which are enforceable by the Administrator.

"Final permit" means the version of a permit issued by the Department that has completed all review procedures required by Article 2, Section 14, and for Class I permit, Article 2, Section 13.

"Fixed capital cost" means the capital needed to provide all the depreciable components of a source.

"Fuel burning equipment" means any furnace, boiler, apparatus, stack, and all associated equipment used in the process of burning fuel.

"Fugitive dust" means solid airborne particulate matter emitted from any source other than a flue or stack.

"Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Garbage" means all animal, fruit, or vegetable waste residue which is produced by preparation, dressing, use, cooking, dealing in, or storage of meats, fish, fowl, fruits, vegetables, cereals, grains for human consumption, and coffee or tea grounds.

"General permit" means a general construction permit, a Class I or Class II general operating permit, or a combination general construction permit and general operating permit that meets the requirements of Article 2, Section 9.

"Global Warming Potential" means the ratio of the time integrated radiative forcing from the instantaneous release of one kilogram (1.0 kg) of a trace substance relative to that of one kilogram (1.0 kg) of a reference gas, i.e., carbon dioxide (CO<sub>2</sub>). The pollutant greenhouse gases (GHGs) is adjusted to calculate CO<sub>2</sub> equivalence using "Table A-1 – Global Warming Potentials" at 40 CFR Part 98, Subpart A, as published in the Federal Register on November 29, 2013 (Volume 78, Number 230, Pages 71948-71949).

"Greenhouse gases (GHGs)" means the air pollutant defined as the aggregate group of six (6) gases: carbon dioxide ( $CO_2$ ), nitrous oxide ( $N_2O$ ), methane ( $N_2O$ ), methane

"Good Engineering Practice (GEP) Stack Height" means the greater of:

- (1) Sixty-five (65) meters;
- (2) For stacks in existence on January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals required, Hg = 2.5H, provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limit, where:
  - Hg = good engineering practice stack height measured from the ground level elevation at the base of the stack; and,
  - H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack.
- (3) For all other stacks, Hg = H + 1.5L, where:
  - Hg = good engineering practice stack height measured from the ground level elevation at the base of the stack; and,
  - H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack; and,
  - L = lesser dimension (height of projected width) of nearby structure(s).

Provided that the Director may require the use of a field study of fluid model to verify GEP stack height for the source; or

(4) The height demonstrated by fluid model or a field study approved by the Director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures, or nearby terrain features.

"Hazardous air pollutant" means any air pollutant:

- (1) Listed in Appendix II or Appendix III of the LLCAPCPRS, or
- (2) To which no ambient air quality standard is applicable and which in the judgment of the Director may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

"High terrain" means any area having an elevation nine hundred (900) feet or more above the base of the stack of a source.

"Hospital waste" means discards generated at a hospital, except unused item returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment, or cremation.

"Incinerator" means any article, equipment, contrivance, structure or part of a structure, used to dispose of combustible refuse by burning, consisting of refractory lined combustion furnaces in series, physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate design parameters necessary for maximum combustion of the material to be burned. Coatings bake off ovens (burn-off furnaces, part, rack, and drum reclamation units) that use pyrolysis to remove coating material from parts hangers and/or other devices with similar function shall be considered incinerators, and may be subject to regulation under the New Source Performance Standards (40 CFR Part 60) Subpart CCCC or DDDD requirements for Commercial-Industrial Solid Waste Incineration (CISWI) units. Furnaces owned and operated by law enforcement agencies solely to dispose of ammunition, fireworks or similar flammable or explosive materials shall not be considered incinerators.

"Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.

"Insignificant activities" refers to activities and emissions that may be excluded from reporting for operating permit applications and/or emissions inventories.

"Installation" means an identifiable piece of process equipment. (This definition does not apply to the Prevention of Significant Deterioration program. See the definition for "Building, structure, facility, or installation" set forth in this section.)

"LLCAPCPRS" means the Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards. This may also be referred to as the Regulations and Standards.

"LLCHD" mean the Lincoln-Lancaster County Health Department.

"Low terrain" means any area other than high terrain.

"Lowest Achievable Emission Rate (LAER)" means, for any source, the more stringent emission rate from either:

- (1) The most stringent emission limitation contained in the implementation plan of any state for such class or category of sources (as adopted by the Lancaster County Board of Commissioners) unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or
- (2) The most stringent emission limitation which is achieved in practice by such class or category or source and adopted by the Council. These limitations, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

"Major emissions unit" means:

(1) Any emissions unit that emits or has the potential to emit one hundred (100) tons per year or more of the PAL pollutant in an attainment area; or

(2) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Act for nonattainment areas.

"Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

- (1) Any net emissions increase that is considered significant for volatile organic compounds (VOC) or nitrogen oxides (NOx) shall be considered significant for ozone.
- (2) A physical change or change in the method of operation shall not include:
  - (a) Routine maintenance, repair, and replacement;
  - (b) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Energy Regulatory Act;
  - (c) Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;
  - (d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
  - (e) Use of an alternative fuel or raw material by a stationary source which:
    - The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR Part 52 §52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I or 40 CFR Part 51 §51.166; or
    - (2) The source is approved to use under any permit issued under regulations approved pursuant to 40 CFR Part 51 §51.165.
  - (f) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR Part 52 §52.21 or regulations approved pursuant to 40 CFR Part 51, Subpart I; or
  - (g) Any change in ownership at a stationary source.
  - (h) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
    - (1) The State Implementation Plan for the State in which the project is located; and
    - (2) Other requirements necessary to attain and maintain the National Ambient Air Quality Standards (NAAQS) during the project and after it is terminated.
  - (i) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
  - (j) The reactivation of a very clean coal-fired electric utility team generating unit.
- (3) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under Article 2, Section 19 for a PAL for that pollutant. Instead, the definition of "PAL major modification" shall apply.

"Major source baseline date" means, in the case of  $PM_{10}$  and sulfur dioxide (SO<sub>2</sub>), January 6, 1975, in the case of nitrogen dioxide (NO<sub>2</sub>), February 8, 1988, and in the case of  $PM_{2.5}$ , October 20, 2010.

"Major stationary source" or "major source" means any source identified in Article 2, Section 2.

"Maximum achievable control technology (MACT)" means:

(1) For new sources, the emission limitation reflecting the maximum degree of reduction in hazardous air pollutant emissions that is deemed achievable, which is no less stringent than the emission limitation achieved in practice by the best controlled similar source.

(2) For existing sources, the emission limitation reflecting the maximum degree of reduction in hazardous air pollutant emissions that the Director, taking into consideration the cost of achieving such emission reductions, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory, which is no less stringent than the average emission limitation achieved by the best performing twelve percent (12%) of the existing sources, as determined pursuant to Section 112(d)(3) of the Act.

"Method 9" refers to a visual determination of the opacity of emissions from a stationary source as defined in 40 CFR Part 60, Appendix A-4.

"Method 22" refers to a visual determination of fugitive emissions from material sources and smoke emissions from flares as defined in 40 CFR Part 60, Appendix A-7.

"Minor source" means any source which is not defined as a major source in Article 2, Section 2.

"Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to the Prevention of Significant Deterioration (PSD) Program, as defined in this section, submits a complete permit application. The trigger date is, in the case of  $PM_{10}$  and sulfur dioxide ( $SO_2$ , August 7, 1977, and, in the case of nitrogen dioxide ( $NO_2$ ), February 8, 1988, and in the case of  $PM_{2.5}$ , October 20, 2011. Any minor source baseline date established originally for the Total Suspended Particulate (TSP) increments shall remain in effect and shall apply for purposes of determining the amount of available  $PM_{10}$  increments, except that the Department may rescind any such minor source baseline date where it can be shown to the satisfaction of the Department, that the emissions increase from the major stationary source, or the net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of  $PM_{10}$  emissions. The baseline date is established for each pollutant for which increments or other equivalent measures have been established if the area in which the proposed source or modification would construct is designated as attainment or unclassifiable under Section 107(d)(i)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR Part 52 §52.21 or to regulations approved pursuant to 40 CFR Part 51 §51.166 or to Article 2, Section 19; and, in the case of a major stationary source, the pollutant would be emitted in significant amounts, or in the case of a major modification, there would be a significant net emissions increase of the pollutant.

"Mobile source" means a motor vehicle, nonroad engine, or nonroad vehicle. A motor vehicle is a self-propelled vehicle designed for transporting persons or property on a street or highway. A nonroad vehicle is a vehicle powered by a nonroad engine. A nonroad engine is an internal combustion engine that is not used in a motor vehicle or a vehicle used solely for competition or that is not subject to standards promulgated under Section 111 or Section 202 of the Act.

"Modification" means any physical change in, or change in method of operation of, an affected facility which increases the amount of any air pollutant, except that;

- (1) Routine maintenance, repair, and replacement (except as defined as reconstruction) shall not be considered physical changes; and
- (2) An increase in the production rate or hours of operation shall not be considered a change in the method of operation unless such change would violate a permit condition.

"National Ambient Air Quality Standard" or "National standard" or "NAAQS" means either a primary or a secondary air quality standard established pursuant to the Act.

"Nearby" means, as pertains to Good Engineering Practice Stack Height;

- (1) That distance up to five times the lesser of the height or the width dimension of a structure but not greater than eight-tenths of a kilometer (0.8 km) (one-half of a mile), and
- (2) For conducting demonstrations under paragraph (4) of the definition for "Good Engineering Practice (GEP) Stack Height", that distance not greater than eight-tenths of a kilometer (0.8 km) (one-half of a mile), except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten (10) times the maximum height (HT) of the feature, not to exceed two (2) miles if such feature achieves a height (HT) of eight-tenths of a kilometer (0.8 km) from the stack that is at least forty percent (40%) of the GEP stack height determined by the formula provided in paragraph (3) of the definition for "Good Engineering Practice (GEP) Stack Height" or twenty-six (26) meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

"Necessary pre-construction approvals or permits" means those permits or approvals required under federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

"Net emissions increase" means:

- (1) With respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero (0):
  - (a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to Article 2, Section 19, paragraph (H); and
  - (b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases shall be determined as provided in Article 2, Section 19, paragraph (E) except that paragraphs (E)(5) and (E)(6) of Article 2, Section 19 shall not apply.
  - (c) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs.
- (2) An increase or decrease in actual emissions is creditable only if:
  - (a) It occurs within a reasonable period, not to exceed one (1) year, to be specified by the Director; and
  - (b) The Director has not relied on it in issuing a permit for the source under regulations approved pursuant to 40 CFR Part 51 §51.165, which permit is in effect when the increase in actual emissions from the particular change occurs.
- (3) An increase or decrease in actual emissions of sulfur dioxide (SO<sub>2</sub>), particulate matter (PM), or nitrogen oxides (NOx) that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- (4) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (5) A decrease in actual emissions is creditable only to the extent that:
  - (a) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
  - (b) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;
  - (c) The Director has not relied on it in issuing any permit under regulations in the State Implementation Plan approved pursuant to 40 CFR Part 51, Subpart I or in demonstrating attainment or reasonable further progress; and
  - (d) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (6) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty (180) days.
- (7) Paragraph (1) under the definition for "Actual emissions" for purposes other than the Prevention of Significant Deterioration program' shall not apply for determining creditable increases and decreases.

"Netting" means, for purposes of Article 2, Section 17, paragraph (A)(3), the method used to calculate the difference between the potential emissions (potential to emit) associated with a replacement emission unit and the actual emissions (the average of these emissions over the most recent twenty-four (24) month period) associated with the emission unit being replaced and, if applicable, any concurrent actual emissions increases and decreases associated with other equipment at the source.

"New source" means any stationary source, the construction, modification, or reconstruction of which is commenced after the publication of regulations by the Lincoln-Lancaster County Health Department or the United States Environmental Protection Agency prescribing a standard of performance which will be applicable to such source.

"NSR" means New Source Review, as it relates to the following:

- (1) Prevention of Significant Deterioration (PSD) permits as required by Part C of Title I of the Act;
- (2) Non-attainment New Source Review (NSR) permits as required by Part D of Title I of the Act;
- (3) Minor New Source Review (NSR) as required by Section 110(a)(2)(c) of Part A of Title I of the Act.

"Non-emergency generator" means, for purposes of Article 2, Section 17, paragraph (P), a generator that may be used to produce electricity during periods when electric power from the local utility is available.

"Non-attainment area" means any area designated by the Department or the U.S. Environmental Protection Agency pursuant to Section 107 (d) of the Act as an area exceeding any National Ambient Air Quality Standard (NAAQS).

"Odor" means that property of an air contaminant detectable by the Department, beyond the boundary line of the property on which the source is located.

"Opacity" means a state which renders material partially or wholly impervious to rays of visible light and causes obstruction of an observer's view.

"Open burning" means the burning of any matter in such a manner that the products of combustion resulting from such fires are emitted directly into the ambient air without passing through an adequate stack, duct, or chimney.

"Owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

"PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased Plant-wide Applicability Limitations (PAL) is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

"PAL effective period" means the period beginning with the PAL effective date and ending ten (10) years later.

"PAL major modification" means, notwithstanding the definitions of "major stationary source" and "major modification", any physical change in or change in the method of operation of the Plant-wide Applicability Limitation (PAL) source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

"PAL permit" means the construction permit issued by the Department that establishes a Plant-wide Applicability Limitation (PAL) for a major stationary source.

"PAL pollutant" means the pollutant for which a Plant-wide Applicability Limitation (PAL) is established at a major stationary source.

"Particulate matter (PM)" means any airborne finely divided solid or liquid material, except uncombined water, with an aerodynamic diameter smaller than one hundred micrometers (100 µm). PM is further as follows:

- (1) "PM<sub>10</sub>" means particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (10 μm) as measured by a reference method based on Appendix J at 40 CFR Part 50 or equivalent methods.
- (2) "PM<sub>2.5</sub>" means particulate matter with an aerodynamic diameter less than or equal to a nominal two and one-half micrometers (2.5 μm) as measured by a reference method based on Appendix L at 40 CFR Part 50 or equivalent methods.

"Particulate matter (PM) emissions" means particulate matter emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method, specified by the U.S. Environmental Protection Agency, or by a test method specified in the LLCAPCPRS. PM emissions are further classified as follows:

- (1) "PM<sub>10</sub> emissions" means particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (10  $\mu$ m) emitted to the ambient air.
- (2) "PM<sub>2.5</sub> emissions" means particulate matter with an aerodynamic diameter less than or equal to a nominal two and one-half micrometers (2.5 μm) emitted to the ambient air.

"Performance test" means measurements of emissions or other procedures used for the purpose of determining compliance with a standard of performance conducted in accordance with approved test procedures.

"Permit revision" means a revision to an operating permit that meets the requirements set forth in Article 2, Section 15, or a revision to a construction permit as provided for under Article 2, Section 17, paragraph (N).

"Permitting authority" means the Lincoln-Lancaster County Health Department (LLCHD).

-"Person" means any individual, partnership, limited liability company, firm, association, public or private corporation, trustee, receiver, assignee, estate, public, or private institution, group, public or private agency, municipality or other governmental subdivision, political subdivision of this state, any other state or political subdivision or agency thereof of any legal successor, representative, agent or agency of the foregoing.

"Plan or Implementation Plan" means an implementation plan adopted by the Nebraska Department of Environmental Quality pursuant to Section 110 of the Act, to attain and maintain a national standard.

"Plant-wide applicability limitation (PAL)" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with Article 2, Section 19, paragraph (K).

"Pollution prevention" means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal: it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Article 2, Section 26.

"Predictive emissions monitoring system (PEMS)" means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O<sub>2</sub> or CO<sub>2</sub> concentrations), and calculate and record the mass emissions rate (for example, pounds per hour) on a continuous basis.

"Premises" shall mean a tract of land, consisting of one platted lot or irregular tract, or more than one platted lot or irregular tract, provided such lots or tracts are under common ownership and contiguous.

"Prevention of Significant Deterioration (PSD) program" means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of 40 CFR Part 51 §51.166 or 40 CFR Part 52 §52.21. Any permit issued under such a program is a major New Source Review (NSR) permit.

"Primary standard" means a primary National Ambient Air Quality Standard (NAAQS) identified in Article 2, Section 4.

"Process" means any action, operation or treatment, and all methods and forms of manufacturing or processing, that may emit smoke, particulate matter, gaseous matter, or other air contaminant.

"Process equipment" means any equipment, device, or contrivance for changing any materials whatsoever or for storage or handling of any materials, the use or existence of which may cause any discharge of air contaminants.

"Process weight" means the total weight of all materials introduced into any source operation. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not.

"Process weight rate" means, for continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof. For a cyclical or batch source operation, the total process weight for a period that covers a complete operation or an integral number of cycles divided by the number of hours of actual process operation during such a period. Where the nature of any process or operation, or the design of any equipment, is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

"Project" means a physical change in, or change in method of operation of, an existing major stationary source.

"Projected actual emissions (PAE)" is as defined in Article 2, Section 19, paragraph (F).

"Proposed Class I operating permit" means the version of a permit that the Department proposes to issue and forwards to the Administrator for review.

"Pyrolysis" means the endothermic (absorption of heat) gasification of waste material using external energy.

"Reasonable further progress" means such annual incremental reductions in emissions of the relevant air pollutant as are required by Part D of the Act or may reasonable be required by the Director for the purpose of ensuring attainment of the applicable ambient air quality standard by the applicable date.

"Reconstruction" means a situation where the fixed capital cost of the new components exceeds fifty percent (50%) of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR Part 60, Subpart A §60.15(f)(1)-(3). A reconstructed source will be treated as a new stationary source. In determining best available control technology or lowest achievable emission rate for a reconstructed source, the provisions of 40 CFR Part 60, Subpart A §60.15(f)(4) shall be taken into account in assessing whether a standard of performance under 40 CFR Part 60 is applicable to such source.

"Refuse" means and includes garbage, rubbish, ashes, street refuse, dead animals, vehicles and parts thereof, industrial wastes, construction wastes, sewage treatment residue, leaves, and grass, and any other waste matter or material which accumulates in the conduct of a household, business establishment, shop, or factory of any kind of nature, and any other combustible waste material containing carbon in a free or combined state.

"Region" means:

- (1) An air quality control region designated by Administrator; or
- (2) Any area designated by the State as an air quality control region.

"Regional Administrator" means the Regional designee appointed by the Administrator.

"Regulated air pollutant" means the following:

- (1) Nitrogen oxides (NOx) or any volatile organic compounds (VOCs) as defined in this section;
- (2) Any pollutant for which a national ambient air quality standard has been promulgated;
- (3) Any pollutant that is subject to any standard in Article 2, Section 18; and
- (4) Any pollutant subject to a standard or other requirements established in Article 2, Section 23 relating to hazardous air pollutants, including the following:
  - (a) Any pollutant subject to requirements under Section 112(j) of the Act; and
  - (b) Any pollutant for which the requirements relating to construction, reconstruction, and modification in Section 112(g) of the Act have been met, but only with respect to the individual source subject to these requirements.
- (5) Greenhouse gases (GHGs), follows:
  - (a) Beginning July 1, 2011, the pollutant GHGs is a regulated air pollutant at any stationary source emitting or having the potential to emit one-hundred thousand (100,000) carbon dioxide equivalents (CO<sub>2</sub>e) per year, or more.

"Regulated air pollutant for fee purposes" means any regulated air pollutant identified in the previous section, except for the following:

- (1) Particulate matter, excluding PM<sub>10</sub>;
- (2) Any pollutant that is a regulated air pollutant solely because it is a Class I or II substance subject to a standard promulgated under or established by Title VI of the Act; and
- (3) Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation promulgated under Section 112(r) of the Act.
- (4) Greenhouse gases (GHGs).

## "Regulated NSR pollutant" means the following:

- (1) Any pollutant for which a National Ambient Air Quality Standard (NAAQS) has been promulgated and any constituents or precursors for such pollutants identified by the Administrator. Precursors for the purpose of New Source Review (NSR) are as follows:
  - (a) Volatile organic compounds (VOCs) and nitrogen oxides (NOx) are precursors to ozone in all attainment and unclassifiable areas.
  - (b) Sulfur dioxide (SO<sub>2</sub>) and NOx are precursors to PM<sub>2.5</sub> in all attainment an unclassifiable area.
- (2) Any pollutant that is subject to any standard promulgated under Section 111 of the Act:
- (3) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act; or
- (4) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in Section 112 of the Act or added to the list pursuant to Section 112(b)(2) of the Act, which have not been delisted pursuant to Section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Act.
- (5) Greenhouse gases (GHGs) is a regulated NSR pollutant at a stationary source under the following circumstances:
  - (a) Beginning January 2, 2011,
    - (1) The stationary source is a new major stationary source for a regulated NSR pollutant that is not GHGs, and also will emit or will have the potential to emit seventy-five thousand (75,000) tons per year carbon dioxide equivalents (CO<sub>2</sub>e) or more; or
    - (2) The stationary source is an existing major stationary source for a regulated NSR pollutant that is not GHGs, and also will have an emissions increase of a regulated NSR pollutant, and an emissions increase of seventy-five thousand (75,000) tons per year CO<sub>2</sub>e or more; and
  - (b) Beginning July 1, 2011, in addition to the provisions in paragraph (5)(a), above,
    - (1) The stationary source is a new stationary source that will emit or have the potential to emit one-hundred thousand (100,000) tons per year CO<sub>2</sub>e or more; or
    - (2) The stationary source is an existing stationary source that emits or has the potential to emit one-hundred thousand (100,000) tons per year CO<sub>2</sub>e or more, when such stationary source undertakes a physical change or change in the method of operation that will result in an emissions increase of seventy-five thousand (75,000) tons per year CO<sub>2</sub>e or more.
  - (c) The term emissions increase as used in (5)(a) and (5)(b) above shall mean that both a significant emissions increase (as calculated in Article 2, Section 19, paragraph (H)), and a significant net emissions increase (as defined Article 2, Section 1, and Article 2, Section 19, paragraph (J)) occur. For the pollutant GHGs, an emissions increase shall be based on tons per year CO<sub>2</sub>e, and shall be calculated assuming the pollutant GHGs is a regulated NSR pollutant, and "significant" shall be defined as seventy-five thousand (75,000) tons per year CO<sub>2</sub>e.

"Replacement unit" means an emission unit for which all the criteria listed in this definition are met. No creditable emission reductions shall be generated from shutting down the existing unit that is replaced.

- (1) The emissions unit is a reconstructed unit within the meaning of "reconstruction" as defined in this section, or the emissions unit completely takes the place of an existing emissions unit.
- (2) The emissions unit is identical to or functionally equivalent to the replace emissions unit.
- (3) The replacement does not change the basic design parameter(s) of the process unit.

<sup>&</sup>quot;Renewal" means the process by which a permit is reissued at the end of its term.

(4) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by an enforceable permit. If the replaced unit is brought back into operation, it shall constitute a new emissions unit.

"Responsible official" means one of the following:

- (1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (a) The facilities employ more than two hundred fifty (250) persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
  - (b) The delegation of authority to such representatives is approved in advance by the permitting authority;
- (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA); or
- (4) For affected sources:
  - (a) The designated representative in so far as actions, standards, requirements, or prohibitions under Article 1, Section 2 are concerned; and
  - (b) The designated representative for any other purposes under Title V of the Act.

"Rule, regulation or standard" means any rule or regulation of the City of Lincoln or the Lancaster County Board of Commissioners.

"Salvage operation" means any operations conducted in whole or in part for the salvaging or reclaiming of any product or material.

"Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification but do not come from the major stationary source or major modification itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

- (1) Emissions from ships or trains coming to or from the new or modified stationary source; and
- (2) Emissions from any off-site support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

"Secondary standard" means a national secondary ambient air quality standard identified in Article 2, Section 4.

"Section 502(b)(10) changes" are changes provided for in Section 502(b)(10) of the Act. Such changes do not include changes that would violate applicable requirements or applicable requirements under the Act, or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. These are changes allowed within a permitted facility without requiring a permit revision if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under the permit. The facility must provide the Department with written notification of the proposed changes at least thirty (30) days in advance unless the Director determines a different time frame due to an emergency.

"Significant" means, as pertains to a modification in a non-attainment area, a net increase in actual emissions by a rate that would equal or exceed the rates established in Table 1-1, as follows:

Table 1-1

Pollutant	Emission Rate (in tons per year, or tpy)	
Carbon Monoxide (CO)	100 tpy	
Nitrogen Oxides (NO <sub>x</sub> )	40 tpy	

Table 1-1

Pollutant	Emission Rate (in tons per year, or tpy)		
Sulfur Dioxide (SO <sub>2</sub> )	40 tpy		
Particulate Matter (PM)	25 tpy		
$PM_{10}$	15 tpy		
PM <sub>2.5</sub>	10 tpy		
Ozone	40 tpy of Volatile Organic Compounds (VOC), or 40 tpy of NO <sub>x</sub>		
Lead	0.6 tpy		
Fluorides	3.0 tpy		
Sulfuric Acid (H <sub>2</sub> S) Mist	7.0 tpy		
Total Reduced Sulfur (including H <sub>2</sub> S)	10 tpy		
Reduced Sulfur Compounds (including H <sub>2</sub> S)	10 tpy		
Municipal Waste Combustor Organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.2 x 10 <sup>-6</sup> megagrams per year (3.5 x 10 <sup>-6</sup> tpy)		
Municipal Waste Combustor Metals (measured as particulate matter)	14 megagrams per year (15 tpy)		
Municipal Waste Combustor Acid Gases (measured as SO <sub>2</sub> and Hydrogen Chloride (HCl))	36 megagrams per year (40 tpy)		
Municipal Solid Waste Landfill Emissions (measured as nonmethane organic compounds (NMOC))	45 megagrams per year (50 tpy)		

<sup>&</sup>quot;Significant emissions increase" is as defined in Article 2, Section 19, paragraph (H).

<sup>&</sup>quot;Significant emissions unit" means an emissions unit that emits or has the potential to emit a plant-wide applicability limitation (PAL) pollutant in an amount that is equal to or greater than the significant level (as defined in this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would quality the unit as a major emissions unit as defined in this section.

<sup>&</sup>quot;Small emissions unit" means an emissions unit that emits or has the potential to emit the plant-wide applicability limitation (PAL) pollutant in an amount less than the significant level for the PAL pollutant, as defined in this section or in the Act, whichever is lower.

<sup>&</sup>quot;Solid waste" means any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial and mining operations, and from community activities.

<sup>&</sup>quot;Source" means any property, real or personal, or person contributing to air pollution.

<sup>&</sup>quot;Speciation" is the process of classifying the separating objects by common characteristics including, but not limited to, chemical mass balance, factor analysis, optical microscopy, and automated scanning electron microscopy. It is the process used to find the relative proportions or mix of air source categories which best accounts for the composition of a pollutant sample.

<sup>&</sup>quot;Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

<sup>&</sup>quot;Stack height" means the distance from the ground level elevation of a stack to the elevation of the stack outlet.

<sup>&</sup>quot;Stack in existence" means that the owner or operator had

<sup>(1)</sup> Begun, or caused to begin, a continuous program of physical on-site construction of the stack; or

- (2) Entered into binding agreements or contractual obligations which could not be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.
- "Standard of performance" means a standard for emission of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction) the Director determines has been adequately demonstrated.
- "Startup of operation" means the beginning of routine operation of an affected facility.
- "State" means any non-federal permitting authority, including any local agency, interstate association, or statewide program.
- "Statement of basis" means a statement that sets forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions. The statement of basis should include, but not be limited to, a discussion of the monitoring and operational requirements, applicability determinations, emissions, limitations, and any other factual information relevant to the development of the draft permit.
- "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation by the Act or by the LLCAPCPRS.
- "Synthetic Minor source" means any source that has the potential to emit any regulated pollutant at levels that meet or exceed the major source thresholds defined in Article 2, Section 2, but has accepted federally enforceable limits to keep potential emissions below the major source thresholds, while maintaining the potential to emit at levels above the minor source thresholds defined in Article 2, Section 5, paragraph (A)(2).
- "Title V Program" means a program approved by the Administrator for purposes of Title V of the Act.
- "Total reduced sulfur" means total sulfur from the following compounds; hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.
- "Total Suspended Particulates (TSP)" means particulate matter as measured by the method described in Appendix B of 40 CFR Part 50.
- "Type 4 waste", also referred to as 'pathological waste', means waste <u>or</u> material consisting of only human or animal remains, anatomical parts, and/or tissue, <u>and related waste materials, including but not limited to</u> the bags/containers used to collect and transport the waste material, and animal bedding, if applicable.
- "Type 5 waste", also referred to as 'hospital/medical/infectious waste', means hospital waste as defined in this section and any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that are listed in paragraphs (1) through (7) of this definition, below. Examples of the following seven (7) waste types are included in the definition of medical/infectious waste found in 40 CFR Part 60, Subpart E §60.51c. Type 5 waste does not include hazardous waste identified or listed under the regulation in Part 261 of Title 40 Chapter I of the CFR; household waste as defined in Section 261.4(b)(1) of Chapter I; ash from incineration of Type 5 waste once the incineration process has been complete, human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage material identified in Section 261.4(a)(1) of Chapter I.
  - (1) Cultures and stocks of infectious agents and associated biologicals;
  - (2) Human pathological waste;
  - (3) Human blood and blood products;
  - (4) Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories;
  - (5) Animal waste;
  - (6) Isolation wastes; and
  - (7) Unused sharps.

"UTM coordinates" refer to the Universal Transverse Mercator coordinate (UTM) system, which provides coordinates on a worldwide flat grid. The UTM coordinate system divides the world into sixty (60) zones, each being six (6) degrees longitude wide and extending from eighty (80) degrees south latitude to eighty-four (84) degrees north latitude. The first zone starts at the International Date Line and proceeds eastward.

"Volatile organic compound (VOC)" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. This includes any such organic compound other than compounds listed in 40 CFR Part 51 \$51.100(s)(1) and (s)(5), effective July 1, 2014, which have been determined to have negligible photochemical reactivity. A list of non-VOC compounds is provided in Table 1-2 below for reference purposes only. Table 1-2 may not reflect revisions made to 40 CFR Part 51 \$51.100(s)(1) and (s)(5) subsequent to the effective date referenced above.

Table 1-2

CAS Number	Compound Name	Other Names or Designations	
67-64-1	Acetone	Propanone	
74-82-8	Methane		
74-84-0	Ethane		
75-09-2	Methylene Chloride	Dichloromethane	
75-10-5	Difluoromethane	HFC-32	
75-37-6	1,1-Difluoroethane	HFC-152a, R-152a	
75-45-6	Chlorodifluoromethane	HCFC-22, R-22	
75-46-7	Trifluoromethane	HFC-23, R-23, Fluoroform	
75-68-3	1-Chloro-1,1-Difluoroethane	HCFC-142b, R-142b	
75-71-8	Dichlorodifluoromethane	CFC-12, R-12	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	CFC-113	
76-14-2	1,2-Dichlorotetrafluoroethane	CFC-114, R-114	
76-15-3	Chloropentafluoroethane	CFC-115, R-115	
79-20-9	Methyl Acetate		
98-56-6	1-Chloro-4-(Trifluoromethyl)Benzene	Parachlorobenzotrifluoride (PCBTF)	
127-18-4	Tetrachloroethylene	Perchloroethylene	
306-83-2	2,2-Dichloro-1,1,1-Trifluoroethane	HCFC-123, R-123	
354-23-4	1,2-Dichloro-1,1,2-Trifluoroethane	HCFC-123a	
354-33-6	1,1,1,2,2-Pentafluoroethane	HFC-125, R-125	
359-35-3	1,1,2,2-Tetrafluoroethane	HFC-134, R-134	
375-03-1	1,1,1,2,2,3,3-Heptafluoro-3-methoxy-propane	HFE-7000	
406-58-6	1,1,1,3,3-Pentafluorobutane	HFC-365mfc	
420-46-2	1,1,1-Trifluoroethane	HFC-143a, R-143a	
422-56-0	3,3-Dichloro-1,1,1,2,2-Pentafluoropropane	HCFC-225ca	
431-63-0	1,1,1,2,3,3-Hexafluoropropane	HFC-236ea	
431-89-0	1,1,1,2,3,3,3-Heptafluoropropane	HFC 227ea	
437-17-2	1,1,1,2,3-Pentafluoropropane	HFC-245eb	
460-73-1	1,1,1,3,3-Pentafluoropropane	HFC-245fa	
507-55-1	1,3-Dichloro-1,1,2,2,3-pentafluoropropane HCFC-225cb		
593-70-4	Chlorofluoromethane HCFC-31		
616-38-6	Dimethyl carbonate		
679-86-7	1,1,2,2,3-Pentafluoropropane	HFC-245ca	

Table 1-2

CAS Number	Compound Name	Other Names or Designations	
690-39-1	1,1,1,3,3,3-Hexafluoropropane	HFC-236fa	
811-97-2	1,1,1,2-Tetrafluoroethane	HFC-134a, R-134a	
1615-75-4	1-Chloro-1-Fluoroethane	HCFC-151a	
1717-00-6	1,1-Dichloro-1-Fluoroethane	HCFC-141b, R-141b	
2837-89-0	2-Chloro-1,1,1,2-Tetrafluoroethane	HCFC-124, R-124	
9005-37-2	Propylene Carbonate		
23731-38-6	Methyl Formate		
24270-66-4	1,1,2,3,3-Pentafluoropropane	HFC-245ea	
29118-24-9	trans-1,3,3,3-Tetrafluoropropene	HFO-1234ze	
74552-83-3	1,1,1-Trichloroethane	Methyl Chloroform	
78522-47-1	Bis(Difluoromethoxy)(Difluoro)Methane	HFE-236ca12	
91315-61-6	Trichlorofluoromethane	CFC-11, R-11	
95508-16-0	Ethylfluoride	HFC-161	
102687-65-0	trans-1-Chloro-3,3,3-Trifluoroprop-1-ene		
132182-92-4	1,1,1,2,2,3,4,5,5,5-Decafluoro-3-Methoxy-4-Trifluoromethyl-Pentane	HFE-7300	
161075-02-1	1-(Difluoromethoxy)-2-[(Difluoromethoxy)(Difluoro)Methoxy]-1,1,2,2-Tetrafluoroethane	H-Galden 1040x, or H-Galden ZT 130 (or 150 or 180)	
163702-05-4	1-Ethoxy-1,1,2,2,3,3,4,4,4-Nonafluorobutane	HFE-7200	
163702-06-5	2-(Ethoxydifluoromethyl)-1,1,1,2,3,3,3-Heptafluoropropane		
163702-07-6	1,1,1,2,2,3,3,4,4-Nonafluoro-4-Methoxy-Butane	HFE-7100	
163702-08-7	2-(Difluoromethoxymethyl)-1,1,1,2,3,3,3-Heptafluoropropane		
188690-78-0	1,2-Bis(Difluoromethoxy)-1,1,2,2-Tetrafluoroethane	HFE-338pcc13	
193487-54-6	1,1,1,2,3,4,4,5,5,5-Decafluoropentane	HFC 43-10mee	
297730-93-9	3-Ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-Dodecafluoro-2- (Trifluoromethyl) Hexane	HFE-7500	
N/A	Cyclic, Branched, Or Linear Completely Methylated Siloxanes		
N/A	<ul> <li>Perfluorocarbon compounds which fall into the following classes:</li> <li>Cyclic, branched, or linear, completely fluorinated alkanes;</li> <li>Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;</li> <li>Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and</li> <li>Sulfur containing perfluorocarbons with no unsaturations and</li> </ul>		
	Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.		

(1) The following compound(s) are VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements: t-butyl acetate.

<sup>&</sup>quot;Wood waste" means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings.

<sup>&</sup>quot;Yard waste" means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. They come from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.

## SECTION 4. AMBIENT AIR QUALITY STANDARDS.

The ambient air quality standards for Lancaster County, Nebraska are:

- (A) Particulate Matter (PM).
  - (1) PM<sub>10</sub> Primary and Secondary Standards:
    - (a) Level: One hundred fifty (150) micrograms per cubic meter (μg/m³);

Averaging Time: Twenty-four (24) hours;

Form: Not to be exceeded more than once per year on average over three (3) years.

- (b) Attainment of these standards is determined in accordance with Appendix K of 40 CFR Part 50 (version July 1, 2014), which is adopted and incorporated herein.
- (2)  $PM_{2.5}$ :
  - (a) Primary Standard:

Level: Twelve (12.0)  $\mu$ g/m<sup>3</sup>;

Averaging Time: Annual;

Form: Annual mean averaged over three (3) years.

(b) Secondary Standard:

Level: Fifteen (15.0) μg/m<sup>3</sup>;

Averaging Time: Annual;

Form: Annual mean averaged over three (3) years.

(c) Primary and Secondary Standard:

Level: Thirty-five (35.0) μg/m<sup>3</sup>;

Averaging Time: Twenty-four (24) hours;

Form: Ninety-eighth (98th) percentile averaged over three (3) years.

- (d) Attainment of these standards is determined in accordance with Appendix N of 40 CFR Part 50 (version July 1, 2014), which is adopted and incorporated herein.
- (B) Sulfur Dioxide (SO<sub>2</sub>).
  - (1) Primary Standard:
    - (a) Level: Seventy-five (75) parts per billion;

Averaging Time: One (1) hour;

Form: Ninety-ninth (99th) percentile of one-hour (1-hr) daily maximum concentrations averaged over three (3) years.

- (2) Secondary Standard:
  - (a) Level: Five-tenths of a part per million (0.5 ppm);

Averaging Time: Three (3) hours;

Form: Not more than one (1) exceedance per year.

- (b) Attainment of this standard is determined in accordance with Appendix T of 40 CFR Part 50 (version July 1, 2014), which is adopted and incorporated herein.
- (C) Nitrogen Dioxide (NO<sub>2</sub>).
  - (1) Primary Standard:
    - (a) Level: One hundred (100) parts per billion;

Averaging Time: One (1) hour;

Form: Ninety-eighth (98th) percentile averaged over three (3) years.

- (2) Primary and Secondary Standards:
  - (a) Level: Fifty-three (53) parts per billion;

Averaging Time: Annual;

Form: Annual mean.

- (b) Attainment of this standard is determined in accordance with Appendix S of 40 CFR Part 50 (version July 1, 2014), which is adopted and incorporated herein.
- (D) Carbon Monoxide (CO).
  - (1) Primary Standards:
    - (a) Level: Nine (9.0) parts per million;

Averaging Time: Eight (8) hours;

Form: Not more than one (1) exceedance per year.

(b) Level: Thirty-five (35.0) parts per million;

Averaging Time: One (1) hour;

Form: Not more than one (1) exceedance per year.

(c) Attainment of this standard is determined in accordance with 40 CFR Part 50 §50.8 (version July 1, 2014), which is adopted and incorporated herein.

#### (E) Ozone.

(1) Primary and Secondary Standards:

(a) Level (1997 Standard): Eight-hundredths (0.08) of a part per million;

Averaging Time: Eight (8) hours;

Form: Daily maximum average concentration.

(Attainment of this standard is determined in accordance with Appendix I of 40 CFR Part 50 (version July 1, 2014), which is adopted and incorporated herein).

(b)(a) Level (2008 Standard): Seventy-five thousandths (0.075) (0.070) of a part per million;

Averaging Time: Eight (8) hours;

Form: Annual fourth-highest daily maximum eight-hour (8-hr) concentration averaged over three (3) years.

(Attainment of this standard is determined in accordance with Appendix P of 40 CFR Part 50 (version July 1, 2014), which is adopted and incorporated herein).

## (F) Lead.

(1) Primary and Secondary Standard:

(a) Level: Fifteen-hundredths (0.15) of a microgram per cubic meter;

Averaging Time: Rolling three (3) month average;

Form: Not to be exceeded.

(b) Attainment of this standard is determined in accordance with Appendix R of 40 CFR Part 50 (version July 1, 2014), which is adopted and incorporated herein.

## SECTION 5. OPERATING PERMITS – WHEN REQUIRED.

- (A) Applicability and Scope. The following sources are required to obtain operating permits unless exempted under paragraph (B) of this section:
  - (1) Class I major source permits shall be required to operate any of the following:
    - (a) Any major source as defined in Article 2, Section 2;
    - (b) Any source, including an area source, subject to a standard, limitation, or other requirement under Article 2, Section 18, except as provided in paragraph (B)(1) of this section;
    - (c) Any source, including an area source, subject to a standard or other requirement under Article 2, Sections 23, 27, or 28, except as provided in paragraph (B)(1) of this section:
    - (d) Any affected source;
    - (e) Any source in a source category designated by the Director or required to do so by any other applicable requirement under the LLCAPCPRS or the Act.
  - (2) Unless a Class I permit is required, Class II minor source permits shall be required to operate any of the following:
    - (a) Any source or emissions unit having a potential to emit:
      - (1) Fifteen (15) tons/year or more of particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers (PM<sub>10</sub>) emissions;
      - (2) Forty (40) tons/year or more of sulfur dioxide (SO<sub>2</sub>) or sulfur trioxide (SO<sub>3</sub>), or any combination of the two pollutants;
      - (3) Forty (40) tons/year more of Oxides of Nitrogen (calculated as NO<sub>2</sub>);
      - (4) Forty (40) tons/year or more of volatile organic compounds (VOC);
      - (5) Fifty (50) tons/year or more of carbon monoxide (CO);
      - (6) Six-tenths (0.6) tons/year or more of lead; and/or
      - (7) Two and one-half (2.5) tons/year or more of any hazardous pollutant or an aggregate of ten (10) tons/year or more of any hazardous air pollutants.
    - (b) All incinerators used for <u>cremation of human or animal remains</u>, refuse disposal, or for the processing of salvageable materials except:
      - (1) Refuse incinerators located on residential premises containing five (5) or less dwelling units used only for disposal of residential waste generated on the residential premises where the incinerator is located; and
      - (2) Human/animal crematories and Type 4 (pathological) waste or material burning incinerators whose potential to emit is less than the quantities listed in paragraphs (A)(2)(a)(1)-(7) of this section and for which a construction permit was issued after January 1, 1992. A source that was issued a construction permit prior to this date may request a revision of the permit by applying for an amended permit which will include specific requirements that will allow the source to qualify for the Class II operating permit exemption.
  - (3) Synthetic Minor Permits. Any source or emissions unit required to obtain a Class I permit based on potential emissions may request that potential to emit be limited to below the major source threshold, as provided in paragraphs (A)(3)(a) and (A)(3)(b) of this section:
    - (a) Any source or emissions unit with actual emissions between the levels specified in paragraph (A)(2)(a) above and the major source levels may apply for a Class II permit, as a synthetic minor source, which provides enforceable limits to potential emissions, as provided in Article 2, Sections 7 through 15.
    - (b) Any source or emissions unit with actual greenhouse gases (GHGs) emissions less than one hundred (100) tons per year on a mass basis and/or less than one hundred thousand (100,000) tons per year carbon dioxide equivalents (CO<sub>2</sub>e) may apply for a Class II permit which provides enforceable limits to potential emissions, as provided in Article 2, Sections 7 through 15.
- (B) Source Category Exemptions.
  - (1) In accordance with 40 CFR Part 70, §70.3 paragraphs (b)(1) and (2) as related to §70.3 paragraph (a)(2), all sources listed in paragraph (A) of this section that are not major sources, or affected sources, are exempt from the obligation to obtain a Class I permit unless required to do so under another applicable requirement of the LLCAPCPRS or under the Act.

- (2) The following sources are exempt from applying for and having a Class I or II operating permit:
  - (a) All sources and source categories that would be required to obtain a permit solely because they are subject to 40 CFR Part 60, Subpart AAA Standards of Performance for New Residential Wood Heaters; and
  - (b) All sources and source categories that would be required to obtain a permit solely because they are subject to 40 CFR Part 61, Subpart M National Emission Standard for Hazardous Air Pollutants for Asbestos, §61.145, Standard for Demolition and Renovation.
  - (c) All sources and source categories subject only to regulations or requirements under Section 112(r) of the Act.
  - (d) All sources and source categories that would be required to obtain a permit solely because of the presence of an emergency generator. This exemption is unavailable to peaking units at electric utilities and any other generator which is used during time periods when power is available from the utility.

#### (C) Emission Units Covered.

- (1) Sources required to obtain an operating permit under the LLCAPCPRS shall identify all relevant emission units in the permit application unless the emissions unit is specifically exempted pursuant to Article 2, Section 7, paragraphs (F)(3) and (F)(4). Emissions that have been exempted from reporting requirements because the emissions unit is an insignificant activity must still be included in the determination of whether a source must obtain a Class I or Class II operating permit.
- (2) A source required to obtain an operating permit under the LLCAPCPRS may comply through one of the following methods:
  - (a) The source may obtain a single permit for all relevant emission points located within a contiguous area under common control, whether or not falling under the same two-digit SIC code; or
  - (b) The source may request and obtain coverage for one or more emission points eligible for coverage under a general permit issued by the Department and obtain a separate permit for emission points not eligible for such coverage.
- (D) Fugitive Emissions. Fugitive emission from a source shall be included in the permit application and covered in the operating permit in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source.
- (E) Except as provided in Article 2, Section 12, paragraph (B), no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under an approved operating permit program. If an operating source submits a timely and complete application for permit issuance, or for renewal, the source's failure to have a permit is not a violation of the LLCAPCPRS or the Act until the Department takes final action on the permit application, provided that the failure to have a permit is through no fault of the source. This protection shall cease to apply if, subsequent to the completeness determination made pursuant to Article 2, Section 7, paragraph (C), the applicant fails to submit any additional information necessary to process the application within the deadline specified in writing by the Department.
- (F) The submittal of a complete Class I or II operating permit application shall not affect the requirement that any source have a pre-construction permit as may be required by the LLCAPCPRS.
- (G) Any source required to obtain a permit under the provisions of this section shall pay permit fees in accordance with Article 1, Section 6, paragraph (D).

Ref: Title 129, Chapter 5, Nebraska Department of Environmental Quality

## SECTION 9. GENERAL-OPERATING PERMITS FOR CLASS I AND II SOURCES.

- (A) If the Director determines that numerous similar sources are subject to identical regulatory requirements, the Director may issue a general permit following the procedures specified in the LLCAPCPRS and the applicable procedures of Article 2, Sections 13<sub>2</sub>-and 14, and 17. The Director shall not issue general permits for affected sources under the Acid Rain program. Source categories for which the Director may issue general construction permits are as follows:
  - (1) Raw or reclaimed aggregate crushing, screening, or processing plants;
  - (2) Incinerators used for cremation of human or animal remains;
  - (3) Truck mix (transit mix) concrete batch plants; and
  - (4) Emergency generators or emergency engines.
- (B) If the Director, in his or her discretion, determines a general permit is appropriate, he or she shall initiate issuance of a general permit by publication of a notice which identifies the criteria for sources that qualify for the general permit. The notice shall be published in a newspaper of general circulation and shall announce the availability of a draft general permit for public review and comment for thirty (30) days.
- (C) The public notice of the draft general permit shall contain:
  - (1) Name, address, and telephone number of the Department;
  - (2) A brief description of the activities and/or operations addressed by the permit;
  - (3) A statement of the criteria for sources that qualify for the permit;
  - (4) A brief description of the comment procedures and the time and place of any hearing if already scheduled, including the procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final general permit decision; and
  - (5) The name, address, and the telephone number of the person from who interested persons may obtain further information, and inspect and copy forms and related documents.
- (D) Any interested person shall have thirty (30) days from issuance of the public notice within which to provide the Director with any written comments concerning the draft general permit and/or request a public hearing in writing.—Such thirty (30) days period may be extended by the Director. At his or her discretion, the Director may extend the comment period to exceed thirty (30) days.
- (E) If any information or public comment is received during the comment period which appears to raise substantial issues concerning the draft general permit, the Director may formulate a new draft general permit which supersedes the original draft general permit and may, if necessary, republish the provide additional public notice.
- (F) Following the close of the public comment period and any public hearing, the Director-shall may issue a general permit as follows:
  - (1) For a general operating permit, the Director shall include:
    - (a) The Director shall include in the general permit all All applicable requirements-applicable pertinent to-other Class I-or Class II operating permits, if the source category includes Class I sources, and; or
    - (b) <u>all other-All applicable</u> requirements-applicable pertinent to Class II <u>operating</u> permits, if the source category includes Class II sources,
  - (2) For a general construction permit, the Director shall include any stationary source or emission unit such that there is a net increase in potential emissions at the stationary source equal to or exceeding the levels identified in Article 2, Section 17.
- (G) Sources The owner of a source that qualifyies for a general permit must apply to the Department for coverage under the terms-for of the applicable general permit, by submitting an application in accordance with Article 2, Section 7 that includes all information necessary to determine qualification for, and to assure compliance with, the general permit. Each application shall include all information necessary to determine qualification for, and to assure compliance with, the applicable general permit. The Department may request additional information as necessary. The owner of a source must apply by:
  - (1) Submitting an application in accordance with Article 2, Section 7 for a general operating permit; or
  - (2) Submitting an application in accordance with Article 2, Section 17 for a general construction permit.

- (H) The Director shall notify-a source the applicant of the final determination-that whether the source qualifies and is covered under the general permit or not. If the Director denies coverage of the source under the general permit, the source applicant may request an adjudicative hearing in accordance with the procedures established by the Lincoln City Council and the Lancaster County Board of Commissioners.
- (I) The Director may, at his or her discretion, issue coverage under a general permit to an individual source without repeating the notice and comment procedures required under paragraphs (A) through (F) of this section, or after providing notice and a comment period in accordance with paragraphs (B) through (D) of this section as deemed appropriate by the Director. The Department shall maintain a list of all sources covered by general permits, which list shall be available for public review.
- (J) A-The owner of a source that obtains a general permit shall be subject to enforcement action for operation without a Class I or Class II operating permit, or a general construction permit, if the source is later determined not to qualify for the terms and conditions of the general permit.
- (K) If some, but not all, of a source's operations, activities, and emissions are eligible for coverage under one or more general permits, the source owner may apply for and receive coverage under one or more general permits for the operations, activities, and emissions that are so eligible. If the source a permit is required under Article 2, Section 5 to obtain a permit addressing the remainder of its operations, activities, and emissions at a source, it the owner may apply for and receive a permit that addresses those items not covered by general permits. In such a case, the permit applicant must identify all operations, activities, and emissions that are subject to general permits. The Class I or Class II operating permit, or construction permit, shall identify any general permits which have been issued.

Ref: Title 129, Chapter 9, Nebraska Department of Environmental Quality

### SECTION 20. PARTICULATE LIMITATIONS AND STANDARDS.

- (A) No person shall cause, suffer, allow, or permit particulate matter (PM) emissions from any processing machine, equipment, device, or other articles, or combination thereof, except indirect heating equipment and incinerators (including coatings bake off ovens and burn-off furnaces), in excess of the amounts allowed in Table 20-2 of this section during any one (1) hour. Incinerators shall be subject to the applicable particulate emission standards established in Article 2, Section 22.
- (B) No person shall cause or allow PM emissions caused by the combustion of fuel to be emitted from any stack or chimney into the outdoor atmosphere in excess of the hourly rate set forth in the following table:

TT 1 1		
Tabl	e 21	)- I

Total Heat Input in Million British Thermal Units Per Hour (MMBtu/hr)	Maximum Allowable Emissions in Pounds per Million British Thermal Units (lbs/MMBtu)	
10 or less	0.60	
Between 10 and 10,000	$A = -\frac{1.026}{I^{0.233}}$	
10,000 or more	0.12	

#### Where:

- A = The allowable emission rate in lbs/MMBtu
- I = The total heat input in MMBtu/hr
- (C) Paragraphs (A) and (B) of this section shall apply unless a more stringent particulate matter standard is specified in the underlying requirements of an applicable federal rule or is specified within a construction permit issued pursuant to Article 2, Sections 17 or 19.
- (D) For the purpose of this section, the total heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack, or the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel burning units at a plant, or on a premises, shall be used for determining the maximum allowable PM emissions.
- (E) Unless subject to a more stringent opacity standard specified in another section of the LLCAPCPRS, no person shall cause or allow emissions from any-existing source of an opacity equal to or greater than twenty percent (20%) as evaluated by an EPA approved method, or recorded by a continuous opacity monitoring system (COMS) operated and maintained pursuant to 40 CFR Part 60, Appendix B, except as provided for in paragraph (F) of this section.
- (F) Exceptions.
  - (1) Emission sources subject to monitoring requirements of Article 2, Section 34, paragraph (E) are allowed to have one six (6) minute period per hour of not more than twenty-seven percent (27%) opacity.
  - (2) For exceptions due to breakdowns or scheduled maintenance, see Article 2, Section 35.

Table 20-2

Process Weight Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Rate of Emissions (lbs/hr)	Process Weight Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Rate of Emissions (lbs/hr)
100	0.05	0.551	16,000	8.00	16.5
200	0.10	0.877	18,000	9.00	17.9
400	0.20	1.40	20,000	10.00	19.2
600	0.30	1.83	30,000	15.00	25.2
800	0.40	2.22	40,000	20.00	30.5
1,000	0.50	2.58	50,000	25.00	35.4
1,500	0.75	3.38	60,000	30.00	40.0
2,000	1.00	4.10	70,000	35.00	41.3
2,500	1.25	4.76	80,000	40.00	42.5
3,000	1.50	5.38	90,000	45.00	43.6
3.500	1.75	5.96	100,000	50.00	44.6
4,000	2.00	6.52	120,000	60.00	46.3
5,000	2.50	7.58	140,000	70.00	47.8
6,000	3.00	8.56	160,000	80.00	49.0
7,000	3.50	9.49	180,000	90.00	50.2
8,000	4.00	10.4	200,000	100.00	51.2
9,000	4.50	11.2	1,000,000	500.00	69.0
10,000	5.00	12.0	2,000,000	1,000.00	77.6
12,000	6.00	13.6	6,000,000	3,000.00	92.7

Interpolation of the data in this table for process weight rates up to 60,000 lbs/hr shall be accomplished by use of the following equation:

Interpolation of the data for process weight rates in excess of 60,000 lbs/hr shall be accomplished by use of the following equation:

$$E = 55.0p^{.11}-40$$

$$E = 4.10p.67$$

### Where:

E = rate of emission in lbs/hr

p = process weight rate in tons/hr

If two (2) or more units discharge into a single stack, the allowable emission rate will be determined by the sum of all process weights discharge into the single stack.

Ref: Title 129, Chapter 20, Nebraska Department of Environmental Quality

#### SECTION 22. INCINERATOR EMISSION STANDARDS.

- (A) The following categories of waste burning combustion units shall be regulated by this section:
  - (1) Small municipal waste combustion units for which construction is commenced after August 30, 1999 or for which modification or reconstruction is commenced after June 6, 2001 shall comply with the requirements of 40 CFR Part 60, Subpart AAAA. This standard applies to municipal waste combustion units that meet two criteria:
    - (a) The unit is new as defined in 40 CFR Part 60, Subpart AAAA §60.1015;
    - (b) The unit has the capacity to combust at least thirty-five (35) tons per day but no more than two hundred fifty (250) tons per day of municipal solid waste or refuse-derived fuel. Units that are exempt from the requirements of Subpart AAAA are set forth in §60.1020 paragraphs (a) through (k) of Subpart AAAA.
  - (2) Small municipal waste combustion units constructed on or before August 30, 1999 shall comply with the requirements of 40 CFR Part 60, Subpart BBBB.
  - (3) Large municipal waste combustors that are constructed on or before September 20, 1994 shall comply with the requirements of 40 CFR Part 60, Subpart Cb.
  - (4) Hospital/medical/infectious waste incinerators constructed on or before June 20, 1996 shall comply with the requirements of 40 CFR Part 60, Subpart Ce. A hospital/medical/infectious waste incinerator (HMIWI) unit means any device that combusts any amount of "Type 5 waste" as defined in Article 2, Section 1 of the LLCAPCPRS. A combustor is not subject to Subpart Ce if it qualifies for one of the exemptions listed in §60.32e paragraphs (b) through (h) of Subpart Ce.
  - (5) Hospital/medical/infectious waste incinerators constructed after June 20, 1996, or modified after March 16, 1998 shall comply with the requirements of 40 CFR Part 60, Subpart Ec. A hospital/medical/infectious waste incinerator (HMIWI) unit means any device that combusts any amount of "Type 5 waste" as defined in Article 2, Section 1 of the LLCAPCPRS. A combustor is not subject to Subpart Ec if it qualifies for one of the exemptions listed in §60.50c paragraphs (b) through (h) of Subpart Ec.
  - (6) Commercial and industrial solid waste incineration units for which construction commenced after November 30, 1999 or for which modification or reconstruction is commenced on or after June 1, 2001 shall comply with the requirements of 40 CFR Part 60, Subpart CCCC. A commercial and industrial solid waste incinerator (CISWI) is a combustion device as defined in §60.2265 of Subpart CCCC. A combustor is not subject to Subpart CCCC if it qualifies for one of the exemptions listed in §60.2020 paragraphs (a) through (o) of Subpart CCCC.
  - (7) Commercial and industrial solid waste incineration units for which construction commenced on or before November 30, 1999 shall comply with the requirements of 40 CFR Part 60 Subpart, DDDD. A commercial and industrial solid waste incinerator (CISWI) is a combustion device as defined in \$60.2875 of Subpart DDDD. A combustor is not subject to Subpart DDDD if it qualifies for one of the exemptions listed in \$60.2555 paragraphs (a) through (o) of Subpart DDDD.
  - (8) Incinerators, as defined at 40 CFR Part 60, Subpart E §60.51, that are capable of charging more than fifty (50) tons per day and that were constructed or modified after August 17, 1971 shall comply with the requirements of 40 CFR Part 60 Subpart E. A combustor is not subject to Subpart E if it meets any of the criteria set forth in §60.50 paragraphs (c) through (e) of Subpart E.
  - (9) Municipal waste combustors capable of charging greater than two hundred fifty (250) tons of municipal solid waste per day, and that were constructed/reconstructed/modified during the dates set forth in paragraphs (A)(8)(a) and (A)(8)(b) below shall comply with the requirements of 40 CFR Part 60, Subpart Ea. A combustor is not subject to Subpart Ea if it qualifies for one of the exemptions listed in §60.50a paragraphs (c) through (k) of Subpart Ea.
    - (a) Municipal waste combustion units with capacities greater than two hundred fifty (250) tons per day of municipal solid waste that were constructed after December 20, 1989 and on or before September 20, 1994 are subject to 40 CFR Part 60, Subpart Ea, except as provided for under §60.50a paragraphs (c) through (k).
    - (b) Municipal waste combustion units with capacities greater than two hundred fifty (250) tons per day of municipal solid waste that were modified or reconstructed after December 20, 1989 and on or before June 19, 1996 are subject to 40 CFR part 60, Subpart Ea, except as provided for under §60.50a paragraphs (c) through (k).

- (10) Large municipal waste combustors capable of charging greater than two hundred fifty (250) tons per day of municipal solid waste, and that are constructed after September 20, 1994 or modified or reconstructed after June 19, 1996 shall comply with the requirements of 40 CFR Part 60, Subpart Eb. A combustor is not subject to Subpart Eb if it qualifies for one of the exemptions listed in §60.60b paragraphs (b), (d), (e), (f), (g), (h), (i), (j), (m), and (p) of Subpart Eb.
- Other solid waste incinerators (OWSI) that commenced construction on or before December 9, 2004 shall comply with the requirements of 40 CFR Part 60, Subpart FFFF. This Subpart applies to very small municipal waste combustion units, of which the charging capacity of municipal solid waste and refuse derived fuel is less than thirty-five (35) tons per day, as well as institutional waste incineration units as defined in \$60.3078 of Subpart FFFF. Unit types listed in \$60.2993 as being excluded from Subpart FFFF are not OSWI units subject to this Subpart.
- Other solid water incinerators (OSWI) for which construction is commenced after December 9, 2004, or for which modification/reconstruction is commenced on or after June 16, 2006, shall comply with the requirements of 40 CFR Part 60, Subpart EEEE. This Subpart applies to very small municipal waste combustion units, of which the charging capacity of municipal solid waste and refuse derived fuel is less than thirty-five (35) tons per day, as well as institutional waste incineration units as defined in \$60.2977 of Subpart EEEE. Unit types listed in \$60.2887 as being excluded from Subpart EEEE are not OSWI units subject to this Subpart.
- (13) Hazardous Waste Combustors. A hazardous waste combustor means a hazardous waste incinerator, hazardous waste burning cement kiln, or hazardous waste burning lightweight aggregate kiln.

  Hazardous waste is defined in 40 CFR Part 261, Subpart A §261.3. A source planning to construct a hazardous waste incinerator in Lancaster County, Nebraska shall contact both the Department and the Nebraska Department of Environmental Quality to determine all of the requirements that are applicable to a facility of this nature and to be advised as to which agency is responsible for specific requirements. A significant number of requirements that are applicable to hazardous waste incinerators are not part of LLCAPCPRS administered by the Department.
- (14) Other Incineration Units. Incineration units that are not subject to the requirements in paragraphs (A)(1) through (A)(13) of this section shall comply with the requirements of paragraphs (A)(14)(a) through (A)(14)(f) below. These incineration units commonly include, but are not limited to, units that combust "Type 4 waste" as defined in Article 2, Section 1 of the LLCAPCPRS, as well as part, rack, and/or drum reclamation units (also referred to as bake-off ovens or burn-off furnaces).
  - (a) No person shall cause or permit particulate matter (PM) emissions from any incinerator to be discharged into the outdoor atmosphere to exceed one-tenth (0.10) of a grain per dry standard cubic foot (gr/dscf) of exhaust gas, corrected to twelve percent (12%) carbon dioxide (CO<sub>2</sub>). The exhaust gases contributed by the burning of a liquid or gaseous fuel shall be excluded.
  - (b) The oven's secondary combustion chamber shall be equipped with an auxiliary burner(s) capable of heating and maintaining the combustion in this chamber at a minimum temperature of one thousand two hundred degrees Fahrenheit (1,200 °F). The burner(s) shall be interlocked with operation of the primary combustion chamber so that the oven cannot be operated unless the secondary combustion chamber burner(s) is functioning.
  - (c) The burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the Director in accordance with good engineering practice.
  - (d) Waste burned during performance testing required by Article 2, Section 34 of the LLCAPCPRS shall be representative of the waste normally burned by the affected facility and shall be charged at a rate equal to the burning capacity of the incinerator. Copies of additional operational data recorded during the test shall be submitted to the Department together with the completed test report forms.
  - (e) Instructions for proper operation of each incinerator shall be posted on-site and written certification that each operator has read these instructions, understands them, and intends to comply, shall be kept on record by the owner.
  - (f) Each incinerator shall meet the design criteria as set forth in the definition of incinerator at Article 2, Section 1 of the LLCAPCPRS and shall meet the additional requirement that the products of combustion be vented through an adequate stack, duct, or chimney.
    - An alternate design for a new unit may be permitted provided it can be shown that the alternative design is at least as effective in controlling pollutant emissions as the design criteria of this section.

- (2) An operating permit can be issued to an existing unit not meeting the design criteria set forth in (A)(14)(e)(f) above, provided compliance with both paragraph (A)(14)(a) of this section and the visible emission standard in Article 2, Section 20, paragraph (E) of the LLCAPCPRS can be demonstrated.
- (g) Chemotherapeutic and low level radioactive wastes (as defined at 40 CFR Part 60 Subpart Ec §60.51c) shall not be incinerated.
- (B) The provisions of this section apply to all new and existing incinerators except for those listed in paragraphs (B)(1) through (B)(3) below. Incinerators not included in the exemptions listed in paragraphs (B)(1) through (B)(3) must comply with the construction permit requirements set forth in Article 2, Section 17, paragraph (A)(2) of the LLCAPCPRS. Units that are exempt from the provisions of this section are as follows:
  - (1) Incinerators used to burn hazardous waste and subject to regulation under Nebraska Administrative Code Title 128, Chapter 7, Section 008;
  - (2) Furnaces used for law enforcement purposes specified in the definition of "incinerator" set forth in Article 2, Section 1 of the LLCAPCPRS; and
  - (3) Air curtain incinerators subject to regulation under 40 CFR Part 60, Subparts AAAA, CCCC, and DDDD, or which operate in compliance with paragraph (C) of this section, and which combust only those materials described in paragraphs (B)(3)(a) through (B)(3)(d) below, and as defined in Article 2, Section 1 of the LLCAPCPRS. Air curtain incinerators must comply with the requirements set forth in paragraph (C) of this section.
    - (a) One hundred percent (100%) wood waste;
    - (b) One hundred percent (100%) clean lumber;
    - (c) One hundred percent (100%) yard waste; and/or
    - (d) A one hundred percent (100%) mixture of only wood waste, clean lumber, and/or yard waste.
- (C) Air curtain incinerators, as defined in Article 2, Section 1 of the LLCAPCPRS, shall comply with the following requirements:
  - (1) Air curtain incinerators shall be used only for the combustion of the following materials:
    - (a) One hundred percent (100%) wood waste, as defined in Article 2, Section 1 of the LLCAPCPRS;
    - (b) One hundred percent (100%) clean lumber, as defined in Article 2, Section 1 of the LLCAPCPRS; and/or
    - (c) One hundred percent (100%) mixture of only wood waste, clean lumber, and/or yard waste, as defined in Article 2, Section 1 of the LLCAPCPRS.
  - Within sixty (60) days after the air curtain incinerator reaches the charge rate at which it will operate, but no later than one hundred eighty (180) days after its initial startup, the air curtain incinerator shall be operated in compliance with the following requirements:
    - (a) The opacity limitation is ten percent (10%) (based on a six (6) minute average), except as described in paragraph (C)(2)(b), below;
    - (b) The opacity limitation is thirty-five percent (35%) (based on a six (6) minute average) during the startup period that is within the first thirty (30) minutes of operation.
  - (3) Except during malfunctions, the requirements of paragraph (C)(2) apply at all times, and each malfunction must not exceed three (3) hours.
  - (4) The owner/operator of an air curtain incinerator shall monitor opacity in accordance with the following requirements:
    - (a) The owner/operator shall use EPA Test Method 9 in Appendix A of 40 CFR Part 60 to determine compliance with the opacity limitations set forth in paragraph (C)(2) above;
    - (b) The owner/operator shall conduct an initial performance test for opacity as specified in 40 CFR Part 60, Subpart A §60.8; and
    - (c) After the initial performance test for opacity, the owner/operator shall conduct annual performance tests no more than twelve (12) calendar months following the date of previous test.
  - (5) Prior to commencing construction on the air curtain incinerator, the owner/operator shall submit the following to the Department:
    - (a) Notification of intent to construct the air curtain incinerator;
    - (b) Notification of planned initial start-up date; and
    - (c) A description of the types of materials to be burned in the air curtain incinerator.

- (6) The owner/operator of an air curtain incinerator shall comply with the following recordkeeping requirements:
  - (a) Keep records of the results of all initial and annual opacity tests on-site (or readily available) in either paper copy or electronic format, unless the Director approves another format, for at least five (5) years.
  - (b) Make all records available for submittal to the Director or for an inspector's onsite review.
  - (c) The results of the initial opacity tests must be submitted no later than sixty (60) days following the initial test. Submit annual opacity test results within twelve (12) months following the previous report.
  - (d) Submit initial and annual opacity test reports as electronic or paper copy on or before the applicable submittal date.
  - (e) Keep a copy of the initial and annual reports onsite (or readily available) for a period of five (5) years.

Ref: Title 129, Chapter 22, Nebraska Department of Environmental Quality

## SECTION 25. NITROGEN OXIDES (CALCULATED AS NITROGEN DIOXIDE) – EMISSIONS STANDARDS FOR EXISTING STATIONARY SOURCES.

- (A) No owner or operator of an installation producing nitric acid, either as an end product or for use in intermediate steps in production of other products, will allow emissions of oxides of nitrogen (calculated as nitrogen dioxide) to exceed five and one-half (5.5) pounds per ton of one-hundred percent (100%) nitric acid produced, or a concentration equivalent to four hundred (400) parts per million by volume (ppmv), whichever is more stringent.
- (B) Paragraph (A) of this section shall apply, unless:
  - (1) The installation is subject to 40 CFR Part 60, Subpart Ga;
  - (2) A more stringent NOx standard for nitric acid production is specified in the underlying requirements of an applicable federal rule; or
  - (3) A more stringent NOx standard for nitric acid production is specified within a construction permit issued pursuant to the LLCAPCPRS.

Ref: Title 129, Chapter 25, Nebraska Department of Environmental Quality

### SECTION 34. EMISSION SOURCES – TESTING AND MONITORING.

- (A) The Department may require any person responsible for the operation of an emission source to make or have tests made to determine the rate of contaminant emissions from the source whenever it has reason to believe, on the basis of estimates of potential contaminant emissions rates from the source and due consideration of probable efficiency of any existing control device, or visible emission determinations made by an official observer, that existing emissions exceed the limitations required in the LLCAPCPRS. Such tests may also be required pursuant to verifying that any newly installed control device meets performance specifications. Should the Department determine that the test did not represent normal operating conditions or emissions, additional tests may be required. Such a requirement shall be considered as an order and subject to all administrative and legal requirements specified.
- (B) Required tests shall be conducted in accordance with the following test methods and procedures, as applicable:
  - (1) 40 CFR Part 51, Appendix M, effective July 1, 2014;
  - (2) 40 CFR Part 60, Appendices A, B, C, F, effective July 1, 2014;
  - (3) 40 CFR Part 61, Appendix B, effective July 1, 2014;
  - (4) 40 CFR Part 63, Appendix A, effective July 1, 2014;
  - (5) 40 CFR Part 266, Appendix IX, effective July 1, 2014; and/or
  - (6) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846 (3rd Edition) (November 1986) and its Updates I, II, IIA, IIB, III, IIIA, IIIB, IVA, and IVB.
  - (7) Such tests shall be conducted by reputable, qualified individuals. A-certified written copy of the test results, certified for completeness and accuracy and signed by the person conducting the test, shall be provided to the Department within sixty (60) days of completion of the test unless a different period is specified in the underlying requirements of an applicable federal rule.
- (C) The owner or operator of a source shall provide notice to the Department at least thirty (30) days prior to testing to afford the Department an opportunity to have an observer present. The Department may, in writing, approve a notice of less than thirty (30) days. If the testing is pursuant to an underlying requirement contained in a federal rule, the notice provisions of the underlying requirement shall apply.
- (D) The Department may conduct tests of emissions of contaminants from any stationary source.
  - (1) Upon written request from the Department, the person responsible for the source to be tested shall cooperate with the Department in providing all necessary test ports in stacks or ducts and such other safe and proper facilities, exclusive of instruments and sensing devices, as may be reasonably required to conduct the test with due regard being given to expenditures and possible disruption of normal operations of the source.
  - (2) A report concerning the findings of such tests shall be furnished to the person responsible for the source upon request.
- (E) A continuous monitoring system for the measurement of opacity shall be installed and placed in operation by the owner or operator of any fossil fuel-fired steam generator with greater than two hundred fifty million British thermal units per hour (250.0 MMBtu/hr) heat input. Exemptions from this requirement will be made if gaseous fuel(s) and/or oil are the only fuels combusted and the source has never been found to be in violation of Article 2, Section 20. Installation, calibration, operation, and reporting shall be performed in accordance with the procedures specified in 40 CFR Part 60.
- (F) The Director may require the owner or operator of any other emission source which is subject to the provisions of these regulations to install, use and maintain such stationary monitoring equipment as is required to demonstrate continuing compliance with any applicable emissions limitations, and to maintain records and make reports regarding such measured emissions to the Department in a manner and on a schedule to be determined by the Director.
- (G) When a new or modified stationary source becomes operational, the owner or operator will submit a written report of performance tests (if required) to the Director within sixty (60) days after reaching maximum capacity but not later than one hundred eighty (180) days after the startup of operations. Failure to meet established performance standards will result in withdrawal of the provisional approval granted to operate the new or modified stationary source. Final approval and issuance of an operating permit will be withheld for operation of the affected facility until such time as the owner or operator has corrected the deficiencies determined by the

performance tests. Upon satisfactory accomplishment of a valid series of performance tests, approval for operation of the new or modified stationary source will be granted through issuance of an operating permit in accordance with Article 2, Section 5.

- (H) Notwithstanding any other provisions of the LLCAPCPRS, the following methods may be used to determine compliance with applicable requirements:
  - (1) A monitoring method approved for the source and incorporated in an operating permit pursuant to Article 2, Section 8;
  - (2) Any compliance test method specified in the State Implementation Plan (SIP);
  - (3) Any test or monitoring method approved for the source in a permit issued pursuant to Article 2, Sections 17, 19, or 27;
  - (4) Any test or monitoring method provided for in the LLCAPCPRS; or
  - (5) Any other test, monitoring, or information gathering method that produces information comparable to that produced by any method described in paragraphs (H)(1) through (H)(4) above.
- (I) Predictive Emissions Monitoring System (PEMS) Requirements. Where allowed by the Department, the owner or operator of any PEMS used to meet a pollutant monitoring requirement must comply with the following:
  - (1) The PEMS must predict the pollutant emissions in the units of the applicable emission limitations.
  - (2) Monitor diluent, either oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) when applicable:
    - (a) Using a CEMS:
      - (1) In accordance with 40 CFR Part 60 Appendix B, Performance Specification 3 for diluent; or
      - (2) With a similar alternative method approved by the Director and EPA; or
    - (b) Using a PEMS with a method approved by the Director and EPA.
  - (3) Any PEMS shall meet the requirements of 40 CFR Part 75 Subpart E, except as provided in paragraph (I)(5) of this section.
  - (4) The owner or operator of any PEMS installed subsequent to adoption of paragraph (I) of this section shall perform the following initial certification procedures:
    - (a) Conduct initial Relative Accuracy Test Audit (RATA) at low, medium, and high operating levels using 40 CFR Part 60, Appendix B:
      - (1) Performance Specification 2, Section 8.4 (pertaining to nitrogen oxides, or NOx) in terms of the applicable standard in parts per million by volume (ppmv), pounds per million British thermal units (lbs/MMBtu), or grams per horsepower-hour (g/hp-hr), except the relative accuracy shall be within ten percent (10%) or two parts per million (2.0 ppm) absolute difference;
      - (2) Performance Specification 3, Sections 8 and 13.2 (pertaining to O<sub>2</sub> or CO<sub>2</sub>); and
      - (3) Performance Specification 4, Sections 8 and 13.2 (pertaining to carbon monoxide, or CO), for owners or operators electing to use a CO PEMS; and
    - (b) Conduct a t-test, an F-test, and a correlation analysis using 40 CFR Part 75, Appendix A, Section 7.6 and 40 CFR Part 75 §75.41 (c)(1) and (2) at low, medium, and high load levels.
      - (1) Calculations shall be based on a minimum of twenty-seven (27) successive emission data points at each tested level which are at least seven (7) minute averages;
      - (2) The t-test and the correlation analysis shall be performed using all data collected at low, medium, and high load levels;
      - (3) The correlation analysis may be waived following review of the waiver request submittal if:
        - (a) The process design is such that it is technically impossible to vary the process to result in a concentration change sufficient to allow a successful correlation analysis statistical test. Any waiver request must also be accompanied with documentation of the reference method measured concentration. The waiver is to be based on the measured value at the time of the waiver. Should a subsequent RATA effort identify a change in the reference method measured value by more than thirty percent (30%), the statistical test must be repeated at the next RATA effort to verify the successful compliance with the correlation analysis statistical test requirement; or

- (b) The data for a measured compound (e.g., NOx, O<sub>2</sub>) are determined to be autocorrelated according to the procedures of 40 CFR Part 75 §75.41 (b)(2). A complete analysis of autocorrelation with support information shall be submitted with the request for waiver. The statistical test shall be repeated at the next RATA effort to verify the successful compliance with the correlation analysis statistical test requirement.
- (5) Allowable Test Adjustments
  - (a) For either NOx or CO and for the purpose of conducting an f-test, if the standard deviation of the EPA reference method is less than either three percent (3%) of the span or five (5) parts per million (ppm), use an EPA reference method standard deviation of either five (5) ppm or three percent (3%) of span.
  - (b) For the diluent CO<sub>2</sub> or O<sub>2</sub>, and for the purpose of conducting an f-test, if the standard deviation of the reference method is less than three percent (3%) of span, use an EPA reference method standard deviation of three percent (3%) of span.
  - (c) For either NOx or CO and at any one test level, if the mean value of the EPA reference method is less than either ten (10) ppm or five percent (5%) of the standard, all statistical tests are waived for that emission parameter at that specific test level.
  - (d) For the diluent O<sub>2</sub> or CO<sub>2</sub> and at any one test level, if the mean value of the reference method is less than three percent (3%) of span, all statistical tests are waived for that diluent parameter at that specific test level.
  - (e) All requests for waivers shall be submitted to the -Department for review and approval. The Director shall approve or deny each waiver request;
  - (f) The owner or operator shall, for each alternative fuel fired in a unit, certify the PEMS in accordance with paragraphs (I)(4)(a) and (I)(4)(b) of this section unless the alternative fuel effects on NOx, CO, and O<sub>2</sub> (or CO<sub>2</sub>) emissions were addressed in the model training process.
  - (g) The PEMS shall be subject to the approval of the Director.
- (6) The owner or operator may vary from paragraphs (I)(3) or (I)(4) of this section if the owner or operator:
  - (a) Demonstrates to the satisfaction of the Director that the alternative is substantially equivalent to the requirements; or
  - (b) Demonstrates to the satisfaction of the Director that the requirement is not applicable.
- (J) Applying for Approval of a PEMs system
  - Owners or operators shall submit the following information in the application for certification or recertification of a PEMS. Approval to use PEMS will be limited to the specific unit and fuel type for which certification testing was conducted. Any future change in the type or composition of the fuel, or combustion characteristics of the boiler, will require that the PEMS be recertified, unless the PEMS was initially constructed to account for different fuel types and/or compositions. In this case, fuel switching would be permitted without recertification. Owners or operators may attempt to justify that a slight change in fuel composition does not affect emissions and the PEMS does not need be recertified. The approval of such justification will be determined by the Director.
  - (2) Owners or operators shall submit the following:
    - (a) Source identification information including unit description, heat rate, and fuel type.
    - (b) A general description of the software and hardware components of the PEMS including manufacturer, type of computer, name(s) of software product(s), and monitoring technique (e.g. method of emission correlation). Manufacturer literature and other similar information shall also be submitted, as appropriate.
    - (c) A detailed description of the PEMS. Identify all operational parameters or ambient conditions which are determined to have an effect on the predicted emissions. If the PEMS is developed on the basis of physical principles, identify any specific physical assumptions or mathematical manipulations made that justify suitability of the model. If the PEMS is developed on the basis of linear or nonlinear regression analysis, submit the paired raw data used in developing or training the model and specifically identify the tested operating range for every input parameter and the number of data points used in the development of the model.
    - (d) A detailed description of the hardware CEMS or the reference method used during the testing period.
    - (e) Data collection procedures, including location of the sampling probe and methods to ensure accurate representativeness of emissions being measured.

- (f) A detailed description of all PEMS operation, maintenance, and quality assurance, and control procedures to be implemented.
- (g) Identification of all sensors pertaining to the PEMS and a detailed description of the sensor validation procedure and calibration frequency for each sensor.
- (h) Description of monitor reliability, accessibility, and timeliness analysis from paragraph (K) of this section.
- (i) A description of the method used to calculate heat input, if applicable.
- (j) Data, calculations, and results of the RATA test and the statistical tests performed at all three load levels and fuel types as listed under 40 CFR Part 75 §75.48 (a)(3).
- (k) Data plots as specified in 40 CFR Part 75 §75.41 (a)(9) and §75.41 (c)(2)(i).
- (I) A summary of all results and calculations which demonstrates that PEMS is equivalent in performance to that of the certified hardware CEMS or EPA reference method.
- (K) Quality Assurance Procedure for PEMS. The owner or operator must develop and implement a quality assurance and quality control (QA/QC) manual for the PEMS and its components. The manual should include daily, quarterly, and semiannual or annual assessment procedures or operations to ensure continuous and reliable performance of the PEMS. The QA/QC manual should also include a ready and detailed specific corrective action plan that can be executed at times when the monitoring systems are inoperative. The QA/QC manual shall be placed in a readily accessible location on the plant site. Owners or operators must assign the responsibility of implementing the QA/QC manual to designated employees and must ensure at all times that these employees have the technical and practical training needed to execute this plan.
  - (1) Daily Assessment. Identify any specific steps, measures, or maintenance plans that can be taken to ensure proper functioning of the monitoring systems. Develop a plan to detect any thermocouple, flow monitoring, and sensor failures. If the PEMS is developed to operate in a specific operating range, develop a plan that will ensure continuous operation within the specified operating range. It is the responsibility of the owner or operator to make sure that the model is trained over a wide range of operating parameters. Operation outside any of the operating ranges will be considered monitor downtime.
  - Quarterly Assessment. The owner or operator must develop and implement a plan that will ensure proper accuracy and calibration of all operational parameters that affect emissions and serve as input to the predictive monitoring system. All sensors must be calibrated as often as needed but never to exceed the time recommended by the manufacturers, for the specific applications these sensors are being used.
  - (3) Semiannual or Annual Assessment. Following initial RATA, conduct RATA semiannually, pursuant to paragraph (I)(4)(a) of this section, at normal load operations, for each unit. If the relative accuracy for the initial or most recent audit for the NOx, CO, CO<sub>2</sub>, (or O<sub>2</sub>) monitors is seven and one-half percent (7.5%) or less, subsequent RATA may be performed on an annual basis.
- (L) PEMS Partial Certification. In certain cases, the owner or operator may not be able to adjust all of the parameters of the model over the entire desired range of operation at one time. In this case, the owner or operator may certify the PEMS in a restricted range of operation in accordance with the PEMS certification procedure.
  - (1) If, at a later date, the owner or operator wishes to operate outside the demonstrated range of the certified PEMS, the owner or operator may extend the demonstrated range by certifying at a new range within sixty (60) days of cumulative operation of the parameter at that range.
- (M) Monitor downtime periods for PEMS include the following:
  - (1) Operating out of range of any operational parameters that affect NOx;
  - (2) One or more sensor failures;
  - (3) Uncertified fuel switching or fuel composition changes unless approved;
  - (4) Failure of any quality assurance procedure specified in accordance with paragraph (K) of this section;
  - (5) Failure to complete a minimum of one (1) cycle of operation (sampling, analyzing, and data recording) for each successive fifteen (15) minute period of emission unit operation; and/or
  - (6) Failing the RATA or any applicable statistical tests. If a PEMS fails the RATA or statistical tests, downtime is the time corresponding to the completion of the sampling that results in the failure, until the time corresponding to the completion of the subsequent successful sampling.

- (N) PEMS Adjustments and Tuning. Adjustments and tuning are permissible provided that the date, reasons, and details of the PEMS adjustments are documented, submitted to the Department and the documentation placed in an accessible location on the plant site, suitable for inspection. The Department must be able to identify, at any time, that the PEMS for any unit has been inspected, the occurrence of the last PEMS adjustment, and the last RATA performed for that unit. The PEMS must be retrained on an augmented set of data which includes the set of data used for training the model prior to adjustment and the newly collected set of data needed for adjustment of the model. When PEMS retraining is performed within the demonstrated range of certification, no RATA testing is required. No tampering with the PEMS is allowed during periods when no PEMS adjustments or tuning are being performed.
- (O) Notification, Recordkeeping, and Reporting. Owners or operators using PEMS shall maintain records of all measurements, data, reports, and other information for each unit. All records, which may be kept either in written or electronic form, shall be maintained for at least five (5) years from the date of each record and shall be made available upon request by authorized representatives of the Department or EPA.
  - Notification.
    - (a) The owner or operator shall submit written notification to the Department in accordance with paragraph (C) of this section of the date of any PEMS RATA.
    - (b) The owner or operator shall submit to the Department a copy of results of any PEMS RATA and statistical testing conducted in accordance with paragraph (K)(3) of this section.
  - (2) Recordkeeping. . The PEMS monitoring records shall include:
    - (a) Hourly emissions in units of the standard and fuel usage (or stack exhaust flow)
    - (b) Records to verify minimum data collection requirement of one (1) cycle of operation (sampling, analyzing, and data recording) for each successive fifteen (15) minute period of emission unit operation.
    - (c) Pounds per million British thermal units (lbs/MMBtu) heat input;
    - (d) Detailed records of any daily, quarterly, and semiannual or annual quality assurance programs or monitoring plans.
    - (e) Compliance with the applicable recordkeeping requirements of 40 CFR Part 75 §75.57 (d) and (e).
    - (f) Compliance with the certification, quality assurance, and quality control record provisions of 40 CFR Part 75 §75.59 (a)(5) through (a)(7).
  - (3) Reporting. The owner or operator of a unit approved to utilize a PEMS for demonstrating continuous compliance shall report, in writing, to the Department on a quarterly basis the monitoring system performance and any exceedance of the applicable emission standard. All reports shall be postmarked or received by the thirtieth (30th) day following the end of each calendar quarter. Written reports shall include the following information:
    - (a) The magnitude of excess emissions computed in accordance with 40 CFR Part 60 §60.13 (h), any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the unit operating time during the reporting period;
    - (b) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, and malfunctions of the affected unit, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted;
    - (c) The date and time identifying each period during which the continuous monitoring system was inoperative or down as described in paragraph (M) of this section and the nature of the system repairs or adjustments;
    - (d) The results of any quality assurance assessments conducted during the quarter;
    - (e) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

Ref: Title 129, Ch. 34, Nebraska Department of Environmental Quality